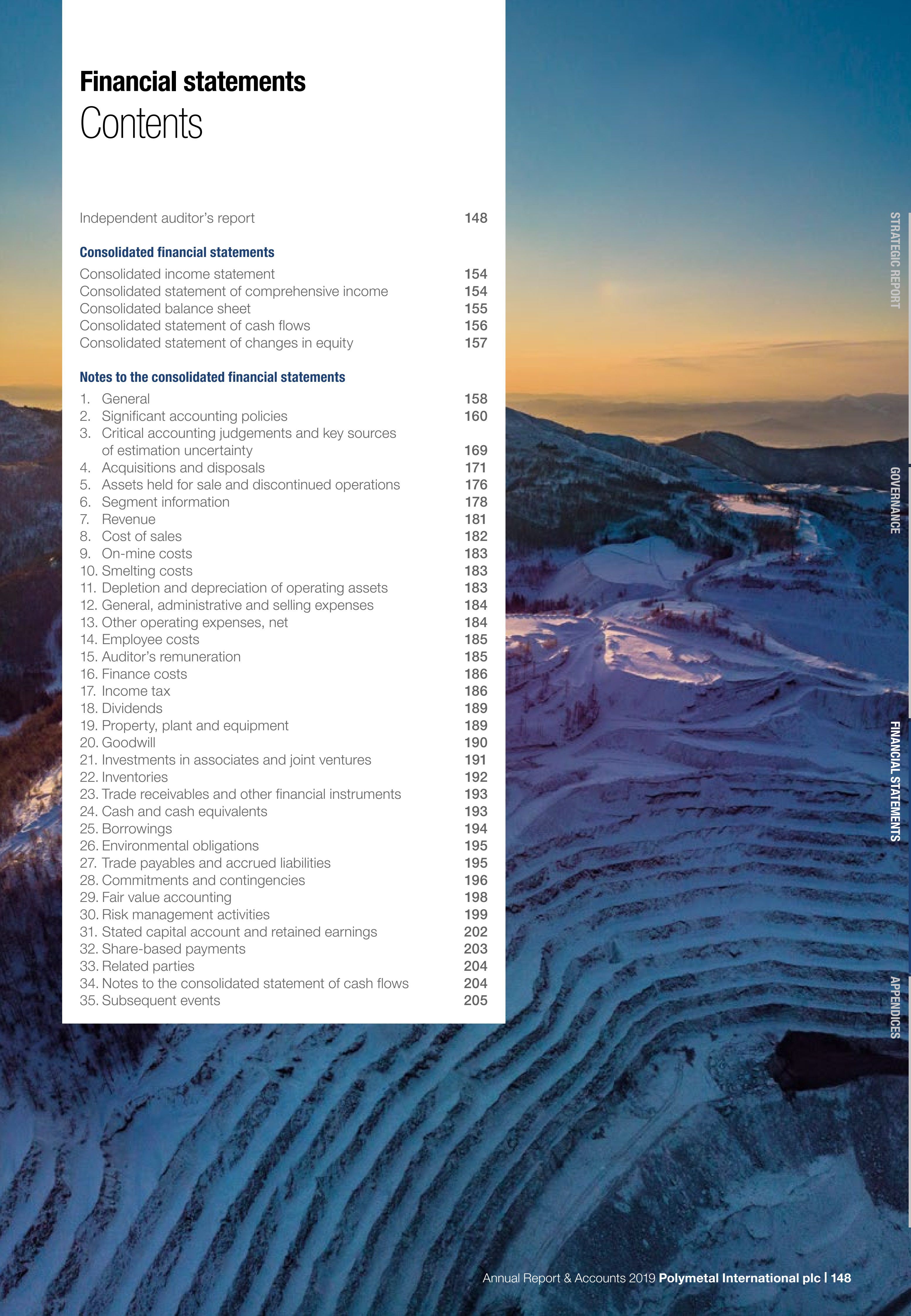

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Independent auditor's report to the members of Polymetal International plc

Report on the audit of the financial statements

1. Opinion

In our opinion the financial statements of Polymetal International plc (the 'parent company') and its subsidiaries (the 'Group'):

- give a true and fair view of the state of the Group's affairs as at 31 December 2019 and of the Group's profit for the year then ended;
- have been properly prepared in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union and IFRSs as issued by the International Accounting Standards Board (IASB);
- have been prepared in accordance with Companies (Jersey) Law, 1991.

We have audited the financial statements which comprise:

- the Consolidated income statement;
- the Consolidated statement of comprehensive income;
- the Consolidated balance sheet;
- the Consolidated statement of cash flows;
- the Consolidated statement of changes in equity; and
- the related notes 1 to 35.

The financial reporting framework that has been applied in their preparation is applicable law and IFRSs as adopted by the European Union and as issued by the IASB.

2. Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report.

We are independent of the Group in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the Financial Reporting Council's (the 'FRC's') Ethical Standard as applied to listed entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

3. Summary of our audit approach

Key audit matters	The key audit matters that we identified in the current year were: • Recoverability of exploration and evaluation assets; and • Recoverability of heap leach ore stock piles and work in progress.
Materiality	The materiality that we used for the financial statements was US$25 million (2018: US$21 million) which was determined on the basis of adjusted profit before tax. We have adjusted profit before tax for net foreign exchanges losses of US$36 million (2018: US$40 million), write down of assets held for sale of US$28 million (2018: nil) and the net loss on disposal of subsidiaries of US$16 million (2018: US$54 million). As there was no impact in 2019, there was no adjustment for a revaluation gain on the initial share on business combination (2018: US$41 million).
Scoping	Our scoping identified 12 components: • Dukat, Omolon, Albazino and Kyzyl were subject to a full scope audit; and • Specified procedures were performed at Svetloye, Voro, Varvara, Amursk, Mayskoye, Nezhda, Amikan and the Corporate component. This scoping represents a change from our 2018 audit with Svetloye and Voro both moving from a full scope audit to focused procedures. Nezhda and Amikan, which were acquired in 2018, were previously considered as part of the Corporate component. Our coverage and scoping assessment are discussed further in section 7 below. A number of balances across all components were tested centrally, as the business activities, processes and controls related to these balances are centralised in the Group's head office.
Significant changes in our approach	The risk associated with accounting for corporate asset transactions was identified as a key audit matter in 2018 but was considered to be less relevant for the 2019 audit as there were no significant corporate asset transactions undertaken. Additionally, the risk associated with the recoverability of metal inventories has been pinpointed in 2019 to the ore designated for heap leaching in addition to the heap leach work in progress. See the Key audit matters description below for further information.

4. Conclusions relating to going concern, principal risks and viability statement

4.1. Going concern

We have reviewed the Directors' statement in note 1 to the financial statements about whether they considered it appropriate to adopt the going concern basis of accounting in preparing them and their identification of any material uncertainties to the Group's ability to continue to do so over a period of at least twelve months from the date of approval of the financial statements.

We considered as part of our risk assessment the nature of the Group, its business model and related risks, including where relevant the impact of the relevant political and economic environments including Brexit, the requirements of the applicable financial reporting framework and the system of internal control. We evaluated the Directors' assessment of the Group's ability to continue as a going concern, including challenging the underlying data and key assumptions used to make the assessment, and evaluated the Directors' plans for future actions in relation to their going concern assessment.

We are required to state whether we have anything material to add or draw attention to in relation to that statement required by Listing Rule 9.8.6R(3) and report if the statement is materially inconsistent with our knowledge obtained in the audit.

Going concern is the basis of preparation of the financial statements that assumes an entity will remain in operation for a period of at least 12 months from the date of approval of the financial statements.

We confirm that we have nothing material to report, add or draw attention to in respect of these matters.

4.2. Principal risks and viability statement

Based solely on reading the Directors' statements and considering whether they were consistent with the knowledge we obtained in the course of the audit, including the knowledge obtained in the evaluation of the Directors' assessment of the Group's ability to continue as a going concern, we are required to state whether we have anything material to add or draw attention to in relation to:

- the disclosures on pages 78–87 that describe the principal risks, procedures to identify emerging risks, and an explanation of how these are being managed or mitigated;
- the Directors' confirmation on page 144 that they have carried out a robust assessment of the principal and emerging risks facing the Group, including those that would threaten its business model, future performance, solvency or liquidity; or
- the Directors' explanation on page 141–145 as to how they have assessed the prospects of the Group, over what period they have done so and why they consider that period to be appropriate, and their statement as to whether they have a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the period of their assessment, including any related disclosures drawing attention to any necessary qualifications or assumptions.

We are also required to report whether the Directors' statement relating to the prospects of the Group required by Listing Rule 9.8.6R(3) is materially inconsistent with our knowledge obtained in the audit.

Viability means the ability of the Group to continue over the time horizon considered appropriate by the Directors.

We confirm that we have nothing material to report, add or draw attention to in respect of these matters.

5. Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) that we identified. These matters included those which had the greatest effect on: the overall audit strategy, the allocation of resources in the audit; and directing the efforts of the engagement team.

These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Independent auditor's report to the members of Polymetal International plc continued

5.1. Recoverability of exploration and evaluation assets

Key audit matter description

At 31 December 2019, the Group held exploration and evaluation (E&E) assets of US$407 million (2018: US$365 million).

Recoverability of E&E assets is dependent on the expected future success of exploration activities. E&E costs, including geophysical, topographical, geological and similar types of costs, are capitalised into exploration assets if management concludes that future economic benefits are likely to be realised based on an assessment of exploration results and identified mineral resources.

The evaluation of each asset's future prospects requires significant judgement. Under IFRS 6 Exploration for and evaluation of mineral resources, potential indicators of impairment include management's plans to discontinue the exploration activities, lack of further substantial exploration expenditure planned, expiry of exploration licences in the period or in the near future, or existence of other data indicating the expenditure capitalised is not recoverable.

Refer to the Audit Committee report on page 106 and the disclosure in Note 19 on page 189. Additionally note that the accounting policy is shown in Note 2 on page 160.

How the scope of our audit responded to the key audit matter

We have reviewed and challenged management's assumptions used in the assessment of the recoverability of the Group's E&E assets, the most significant being the Prognoz asset at US$312 million (2018: US$265 million).

We have obtained an understanding of the design and implementation of management's relevant controls relating to the recoverability of E&E assets.

We have reviewed the Board minutes to confirm that there are no plans to discontinue exploration activities and reviewed the Board approved budget for 2020 to check that specific exploration project spend was identified, where relevant.

We have assessed the recoverability of assets by meeting with operational management to discuss material E&E assets, reviewing drilling and other testing results in the year and confirming future development plans.

We have evaluated licence conditions to check that there were no breaches of key terms, and no licences have expired or expire in the near term.

Key observations

No additional impairments of E&E assets were identified from the work performed.

5.2. Recoverability of heap leach ore stock piles and work in progress

Key audit matter description

At 31 December 2019 ore stockpiles designated for heap leaching and heap leach work in progress balance was US$57 million (2018: US$71 million). At 31 December 2019 total inventories recorded were US$758 million (2018: US$639 million).

Due to a longer heap leach processing cycle that can take up to three years, lower margins and limited track record of processing, we consider that the recoverability assessment of these types of metal inventories requires a higher degree of judgement, and is more sensitive to changes in key assumptions. Historically, the majority of write downs to metal inventories related to ore designated for heap leaching or the heap leach work in progress.

Refer to the Audit Committee report on page 106 and the disclosure in Note 22 on page 192. Additionally note that the accounting policy is shown in Note 2 on page 160.

How the scope of our audit responded to the key audit matter

We have attended inventory counts performed by management's experts, performed roll forward testing from the count dates through to year end by testing management's metal inventory models, and assessed management's experts' methodology, expertise and objectivity.

We have obtained an understanding of the design and implementation of relevant controls in relation to metal inventory measurement.

We have tested the net realisable value ('NRV') to assess whether costs exceed NRV and an impairment should be recorded. To assess management's assumptions we have:

- Challenged the technical recovery assumptions through comparison to actual achieved recoveries and/or approved life of mine plans;
- Challenged the cost assumptions against actual processing costs and the approved budgets and life of mine plans;
- Challenged the price assumptions used by management by comparing these to the long term analyst consensus for long term inventories and forward curves for short term inventories;
- Performed look back tests of recoverability of heap leach ore stockpiles and heap leach work in progress held at 31 December 2018.

We have also performed substantive analytical procedures on management's inventory costing calculations.

Key observations

No additional write-downs of heap leach ore stockpiles and work in progress were identified from the work performed.

6. Our application of materiality

6.1. Materiality

We define materiality as the magnitude of misstatement in the financial statements that makes it probable that the economic decisions of a reasonably knowledgeable person would be changed or influenced. We use materiality both in planning the scope of our audit work and in evaluating the results of our work.

Based on our professional judgement, we determined materiality for the financial statements as a whole as follows:

Group Materiality	US$25 million (2018: US$21 million)
Basis for determining materiality	We used the Group's adjusted profit before tax as the key benchmark. This approach is consistent with our 2018 audit and the selected materiality figure represents 3.6% of the adjusted profit before tax figure (2018: 4.4%) and 1.3% of net assets (2018: 1.5%).
Rationale for the benchmark applied	The use of this metric is consistent with our 2018 audit and has been chosen on the basis that the adjusted profit before tax is a key benchmark for management and investors to appraise the Group's performance. We have adjusted profit before tax for net foreign exchanges losses of US$36 million (2018: US$40 million), write down of assets held for sale of US$28 million (2018: nil) and the net loss on disposal of subsidiaries of US$16 million (2018: US$54 million). As there was no impact in 2019, there was no adjustment for a revaluation gain on the initial share on business combination (2018: US$41 million).

6.2. Performance materiality

We set performance materiality at a level lower than materiality to reduce the probability that, in aggregate, uncorrected and undetected misstatements exceed the materiality for the financial statements as a whole. Group performance materiality was set at 70% of Group materiality for the 2019 audit (2018: 70%). In determining performance materiality, we considered the following factors:

- Our risk assessment, including our assessment of the Group's overall control environment;
- The consistent organisational structure of the Group relative to the prior year audit; and
- Our past experience as auditors which has indicated a low number of uncorrected misstatements identified in prior periods.

6.3. Error reporting threshold

We agreed with the Audit Committee that we would report to the Committee all audit differences in excess of US$1.25 million (2018: US$1.05 million), as well as differences below that threshold that, in our view, warranted reporting on qualitative grounds. We also report to the Audit Committee on disclosure matters that we identified when assessing the overall presentation of the financial statements.

7. An overview of the scope of our audit

The Group holds various mining assets in Russia and Kazakhstan. Our scoping identified 12 components (Svetloye, Dukat, Omolon, Albazino, Voro, Varvara, Amursk, Mayskoye, Kyzyl, Nezhda, Amikan and a single component comprising the support function corporate entities).

Our 2019 scoping followed the same approach as in 2018 where the audit team performed central testing over a number of the Group's standardised processes and controls. For balances which were tested centrally, we have performed substantive audit procedures on all components.

We determined the scope of the procedures to be performed at each component on the balances not tested centrally. We have performed full scope audits at Dukat, Omolon, Albazino and Kyzyl. Focussed procedures were performed at Svetloye, Voro, Varvara, Amursk, Mayskoye, Nezhda, Amikan and the Corporate component. This represents a change from our 2018 scoping where both Svetloye and Voro were previously subject to a full scope audit.

The Group audit team was involved in the work of the component auditors at all stages of the audit process. The signing partner and senior members of the Group engagement team visited the head office in St. Petersburg regularly throughout the year and during the final audit in 2020. Senior members of the team visited Varvara (2018: Amursk).

Our audit work was executed at levels of materiality applicable to each individual component, which were between US$12.5 million and US$20.0 million (2018: US$8.4 million and US$18.9 million).

Independent auditor’s report to the members of Polymetal International plc continued

REVENUE
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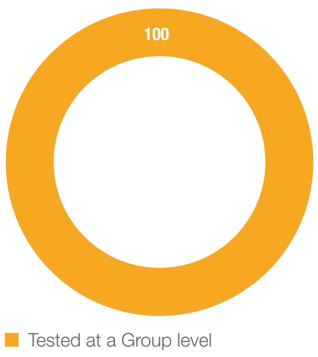

METAL INVENTORIES
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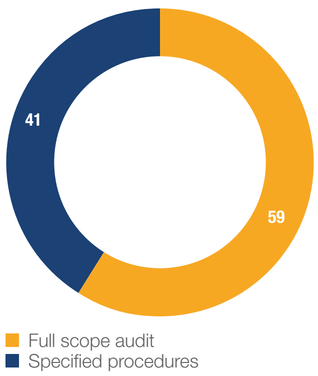

E&E ASSETS
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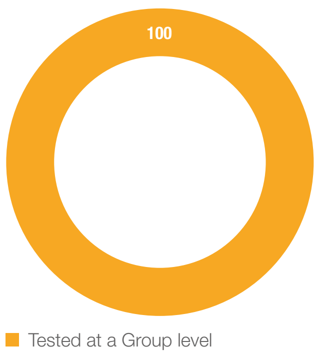

8. Other information

The Directors are responsible for the other information. The other information comprises the information included in the annual report, other than the financial statements and our auditor’s report thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

In this context, matters that we are specifically required to report to you as uncorrected material misstatements of the other information include where we conclude that:

- **Fair, balanced and understandable** – the statement given by the Directors that they consider the annual report and financial statements taken as a whole is fair, balanced and understandable and provides the information necessary for shareholders to assess the Group’s position and performance, business model and strategy, is materially inconsistent with our knowledge obtained in the audit; or
- **Audit Committee reporting** – the section describing the work of the Audit Committee does not appropriately address matters communicated by us to the Audit Committee; or
- **Directors’ statement of compliance with the UK Corporate Governance Code** – the parts of the Directors’ statement required under the Listing Rules relating to the Group’s compliance with the UK Corporate Governance Code containing provisions specified for review by the auditor in accordance with Listing Rule 9.8.10R(2) do not properly disclose a departure from a relevant provision of the UK Corporate Governance Code.

We have nothing to report in respect of these matters.

9. Responsibilities of Directors

As explained more fully in the Directors’ responsibilities statement, the Directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the Directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Directors are responsible for assessing the Group’s ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

10. Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the FRC's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

Report on other legal and regulatory requirements

11. Opinions on other matters prescribed by our engagement letter

In our opinion the part of the Directors' remuneration report to be audited has been properly prepared in accordance with the provisions of the UK Companies Act 2006 as if that Act had been applied to the Company.

12. Matters on which we are required to report by exception

Adequacy of explanations received and accounting records

Under the Companies (Jersey) Law, 1991 we are required to report to you if, in our opinion:

- we have not received all the information and explanations we require for our audit; or
- proper accounting records have not been kept by the parent company, or proper returns adequate for our audit have not been received from branches not visited by us; or
- the financial statements are not in agreement with the accounting records and returns.

We have nothing to report in respect of these matters.

13. Use of our report

This report is made solely to the Company's members, as a body, in accordance with Article 113A of the Companies (Jersey) Law, 1991. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditor's report and those matters we have expressly agreed to report to them on in our engagement letter and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members as a body, for our audit work, for this report, or for the opinions we have formed.

James A. Leigh

James Leigh, FCA
For and on behalf of Deloitte LLP

Recognised Auditor
London, UK
3 March 2020

STRATEGIC REPORT
GOVERNANCE
FINANCIAL STATEMENTS
APPENDICES

Consolidated income statement

		Year ended 31 December 2019			Year ended 31 December 2018		
	Note	**Continuing operations $m**	**Discontinued operations $m**	**Total Group $m**	Continuing operations $m	Discontinued operations $m	Total Group $m
Revenue	7	2,241	5	2,246	1,706	176	1,882
Cost of sales	8	(1,197)	(4)	(1,201)	(971)	(125)	(1,096)
Gross profit		**1,044**	**1**	**1,045**	**735**	**51**	**786**
General, administrative and selling expenses	12	(181)	(1)	(182)	(164)	(11)	(175)
Other operating expenses, net	13	(68)	–	(68)	(47)	(28)	(75)
Share of loss of associates and joint ventures		–	–	–	(1)	–	(1)
Operating profit		**795**	**–**	**795**	**523**	**12**	**535**
Foreign exchange loss, net		(36)	–	(36)	(37)	(3)	(40)
Revaluation of initial share on business combination	4	–	–	–	41	–	41
Loss on disposal of subsidiaries, net	4	(16)	–	(16)	(54)	–	(54)
Write-down of assets held for sale	4	(28)	–	(28)	–	–	–
Change in fair value of contingent consideration liability	29	(23)	–	(23)	7	–	7
Finance income		7	–	7	8	–	8
Finance costs	16	(81)	–	(81)	(71)	–	(71)
Profit before income tax		**618**	**–**	**618**	**417**	**9**	**426**
Income tax expense	17	(135)	–	(135)	(65)	(6)	(71)
Profit for the financial period		**483**	**–**	**483**	**352**	**3**	**355**
Profit for the financial period attributable to:							
Equity shareholders of the Parent		480	–	480	351	3	354
Non-controlling interest		3	–	3	1	–	1
		483	**–**	**483**	**352**	**3**	**355**
Earnings per share ($)							
Basic	31	1.02	–	1.02	0.79	–	0.79
Diluted	31	1.01	–	1.01	0.79	–	0.79

Consolidated statement of comprehensive income

	Year ended 31 December 2019 $m	Year ended 31 December 2018 $m
Profit for the period[1]	**483**	**355**
Items that may be reclassified to profit and loss		
Exchange differences on translating foreign operations	353	(485)
Currency exchange differences on intercompany loans forming net investment in foreign operations, net of income tax	(54)	17
Currency exchange differences recycled to income statement on disposal of foreign operation	–	19
Total comprehensive income/(loss) for the period	**782**	**(94)**
Total comprehensive income/(loss) for the period attributable to:		
Equity shareholders of the Parent	777	(95)
Non-controlling interest	5	1
	782	**(94)**

[1] Profit for the year ended 31 December 2019 includes a loss of $13 million arising on the disposal of Kapan discontinued operation. Profit for the year ended 31 December 2018 included $3 million of profits relating to discontinued operations and a loss of $63 million arising on the disposal of such operations, amounting to a net loss of $60 million.

Consolidated balance sheet

	Note	**31 December 2019 $m**	31 December 2018 restated[1] $m
Assets			
Property, plant and equipment	19	2,810	2,419
Right-of-use assets	20	31	–
Goodwill	21	16	15
Investments in associates and joint ventures		2	2
Non-current loans and receivables		10	6
Deferred tax asset	17	73	73
Non-current inventories	22	114	102
Total non-current assets		**3,056**	**2,617**
Assets held for sale	5	14	74
Current inventories	22	644	537
VAT receivable		149	95
Trade receivables and other financial instruments	23	48	81
Prepayments to suppliers		62	44
Income tax prepaid		18	8
Cash and cash equivalents	24	253	379
Total current assets		**1,188**	**1,218**
Total assets		**4,244**	**3,835**
Liabilities and shareholders' equity			
Accounts payable and accrued liabilities	27	(153)	(146)
Prepayments received	7	(5)	(100)
Current borrowings	25	(214)	(117)
Income tax payable		(7)	(8)
Other taxes payable		(41)	(37)
Current portion of contingent consideration liability	29	(7)	(5)
Current lease liabilities	20	(3)	–
Liabilities associated with assets classified as held for sale	5	(1)	(8)
Total current liabilities		**(431)**	**(421)**
Non-current borrowings	25	(1,518)	(1,782)
Contingent consideration liability	29	(59)	(49)
Deferred tax liability	17	(196)	(152)
Environmental obligations	26	(57)	(32)
Non-current lease liabilities	20	(29)	–
Other non-current liabilities		(3)	(2)
Total non-current liabilities		**(1,862)**	**(2,017)**
Total liabilities		**(2,293)**	**(2,438)**
NET ASSETS		**1,951**	**1,397**
Stated capital account	31	2,424	2,414
Share-based compensation reserve	32	26	24
Translation reserve		(1,302)	(1,599)
Retained earnings		780	540
Shareholders' equity		**1,928**	**1,379**
Non-controlling interest	4	23	18
Total equity		**1,951**	**1,397**

Notes on pages 158 to 205 form part of these financial statements. These financial statements are approved and authorised for issue by the Board of Directors on 3 March 2020 and signed on its behalf by:

Vitaly Nesis
Group CEO

Ian Cockerill
Board Chair

[1] Restated following determination of the final fair value of the assets acquired and the liabilities assumed as at the acquisition date in respect of the Amikan business combination. Refer to Note 4.

Consolidated statement of cash flows

	Note	Year ended 31 December 2019 $m	Year ended 31 December 2018 $m
Net cash generated by operating activities	34	**696**	**513**
Cash flows from investing activities			
Purchases of property, plant and equipment	19	(436)	(344)
Loans forming part of net investment in joint ventures		–	(51)
Net cash outflow on acquisitions	4	–	(6)
Proceeds from disposal of subsidiaries	4	43	15
Loans advanced		(6)	(28)
Receipt of repayment of loans provided		2	35
Net cash used in investing activities		**(397)**	**(379)**
Cash flows from financing activities			
Borrowings obtained	25	1,244	1,697
Repayments of borrowings	25	(1,410)	(1,254)
Repayments of principal under lease liabilities	20	(3)	–
Dividends paid	18	(240)	(213)
Contingent consideration paid	29	(13)	(6)
Net cash (used in)/from financing activities		**(422)**	**224**
Net (decrease)/increase in cash and cash equivalents		(123)	358
Cash and cash equivalents at the beginning of the period	24	379	36
Effect of foreign exchange rate changes on cash and cash equivalents		(3)	(15)
Cash and cash equivalents at the end of the financial period	24	**253**	**379**

Consolidated statement of changes in equity

	Note	Number of shares outstanding (unaudited)	Stated capital account $m	Share based compensation reserve $m	Translation reserve $m	Retained earnings $m	Total equity attributable to the parent $m	Non-controlling interest $m	Total equity $m
Balance at 1 January 2018		**430,115,480**	**2,031**	**21**	**(1,151)**	**406**	**1,307**	**–**	**1,307**
Profit for the financial year		–	–	–	–	353	353	2	355
Other comprehensive income, net of income tax		–	–	–	(448)	–	(448)	(1)	(449)
Share based compensation	32	–	–	12	–	–	12	–	12
Shares allotted to employees	32	1,001,365	9	(9)	–	–	–	–	–
Issue of shares for business combinations	4	36,402,296	358	–	–	–	358	17	375
Issue of shares for contingent consideration	29	1,015,113	10	–	–	–	10	–	10
Issue of shares to acquire non-controlling interest	31	834,055	6	–	–	(6)	–	–	–
Dividends	18	–	–	–	–	(213)	(213)	–	(213)
Balance at 31 December 2018		**469,368,309**	**2,414**	**24**	**(1,599)**	**540**	**1,379**	**18**	**1,397**
Profit for the financial year		–	–	–	–	480	480	3	483
Other comprehensive loss, net of income tax		–	–	–	297	–	297	2	299
Share based compensation	32	–	–	12	–	–	12	–	12
Shares allotted to employees	32	819,892	10	(10)	–	–	–	–	–
Dividends	18	–	–	–	–	(240)	(240)	–	(240)
Balance at 31 December 2019		**470,188,201**	**2,424**	**26**	**(1,302)**	**780**	**1,928**	**23**	**1,951**

Notes to the consolidated financial statements

1. General

Corporate information

Polymetal Group (the Group) is a leading gold and silver mining group with operations in Russia and Kazakhstan.

Polymetal International plc (the Company) is the ultimate parent entity of Polymetal Group. The Company was incorporated in 2010 as a public limited company under Companies (Jersey) Law 1991 and has its place of business in Cyprus. Its shares are traded on the London, Moscow stock exchanges and Astana International Exchange.

Significant subsidiaries

As at 31 December 2019 the Company held the following significant mining and production subsidiaries:

				Effective interest held, %	
Name of subsidiary	Deposits and production facilities	Segment	Country of incorporation	**31 December 2019**	31 December 2018
Gold of Northern Urals CJSC	Voro	Ural	Russia	100	100
Svetloye LLC	Svetloye	Khabarovsk	Russia	100	100
Magadan Silver JSC	Dukat Lunnoye Arylakh	Magadan	Russia	100	100
Mayskoye Gold Mining Company LLC	Mayskoye	Magadan	Russia	100	100
Omolon Gold Mining Company LLC	Birkachan Tsokol Burgali Olcha	Magadan	Russia	100	100
Albazino Resources Ltd	Albazino	Khabarovsk	Russia	100	100
Amur Hydrometallurgical Plant LLC	AGMK Plant	Khabarovsk	Russia	100	100
Varvarinskoye JSC	Varvara	Kazakhstan	Kazakhstan	100	100
Bakyrchik Mining Venture LLC	Bakyrchik	Kazakhstan	Kazakhstan	100	100
Komarovskoye Mining Company LLC	Komar	Kazakhstan	Kazakhstan	100	100
South-Verkhoyansk Mining Company JSC	Nezhda	Yakutia	Russia	100	100
Prognoz Silver LLC	Prognoz	Yakutia	Russia	100	100
GRK Amikan LLC	Veduga	Khabarovsk	Russia	74.31	74.31

Going concern

In assessing its going concern status, the Group has taken account of its financial position, anticipated future trading performance, its borrowings and other available credit facilities, and its forecast compliance with covenants on those borrowings and its capital expenditure commitments and plans. As at 31 December 2019, the Group held $253 million of cash and had net debt of $1,479 million, with $1,904 million of additional undrawn facilities of which $1,079 million are considered committed. Debt of $214 million is due for payment within one year. The Group's cash generation and liquidity remains strong and the Group believes it will be able to operate within existing facilities.

The Board is satisfied that the Group's forecasts and projections, having taken account of reasonably possible changes in trading performance, show that the Group has adequate resources to continue in operational existence for at least the next 12 months from the date of this report and that it is appropriate to adopt the going concern basis in preparing the consolidated financial statements for the year ended 31 December 2019.

Basis of presentation

The Group's annual consolidated financial statements for the year ended 31 December 2019 are prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union. The financial statements have been prepared on the historical cost basis, except for certain financial instruments which are measured at fair value as of end of the reporting period and share-based payments which are recognised at fair value as of measurement date.

The following accounting policies have been applied in preparing the consolidated financial statements for the year ended 31 December 2019.

New standards adopted by the Company and changes in accounting policies

The accounting policies applied are consistent with those adopted and disclosed in the Group financial statements for the year ended 31 December 2018, except for changes arising from the adoption of the following new accounting pronouncements which became effective in the current reporting period:

- IFRS 16 *Leases*;
- IFRIC 23 *Uncertainty over Income Tax Treatments*;
- Amendments to IAS 28 *Investments in Associates and Joint Ventures*;
- Amendments to IFRS 9 *Financial Instruments*;
- Amendments to IAS 19 *Employee Benefits*;
- Annual Improvements to IFRSs: 2015–17 Cycle: IFRS 3 *Business Combinations*, IAS 12 *Income Taxe*s and IAS 23 *Borrowing Costs*.

The Group has determined these amendments do not have a significant impact on its consolidated financial statements or are not applicable to the Group, except for IFRS 16.

IFRS 16 *Leases* replaced the following standards and interpretations: IAS 17 *Leases* and IFRIC 4 *Determining whether an Arrangement contains a Lease*. The new standard provides a single lessee accounting model for the recognition, measurement, presentation and disclosure of leases. IFRS 16 applies to all leases including subleases and requires lessees to recognise assets and liabilities for all leases, unless the lease term is 12 months or less, or the underlying asset has a low value. Lessors continue to classify leases as operating or finance. The principal impact of IFRS 16 is the change of lessee's accounting treatment for the contracts which were previously classified as operating leases.

The Group has elected to adopt the modified retrospective transition approach and so any cumulative effect of transition to IFRS 16 is recognised in retained earnings with no restatement of the comparative period. The comparative period was not restated and is presented in accordance with the accounting policy set out in the 2018 Annual Report.

On transition, lease liabilities were recognised as the present value of lease payments still to be made, discounted at the appropriate incremental borrowing rate of 9.96% applicable at 1 January 2019 to the borrowings in Russian Roubles or Kazakh Tenge. For the majority of leased assets, the corresponding right-of-use asset was recognised equal to the value of the lease liability at 1 January 2019, adjusted for any accrued or prepaid lease payments. Total right-of-use assets and respective lease liabilities, recognised at 1 January 2019, amount to $31 million and principally relate to the leased office buildings and other property (Note 20). The Group has determined that surface lease arrangements with municipal government for the purposes of mining and exploration activities fall out of the IFRS 16 scope.

From 1 January 2019, in the Group's Income Statement depreciation of right-of-use assets and interest expense on the lease liabilities are recognised instead of operating lease expenses under IAS 17. During the year ended 31 December 2019, in relation to leases under IFRS 16 the Group recognised the depreciation of right-of-use assets of $4 million and unwind of discount on lease liabilities of $3 million, which are excluded from EBITDA. For the year ended 31 December 2018, $7 million of operating lease costs were charged and deducted from EBITDA.

The table below presents a reconciliation from operating lease commitments disclosed at 31 December 2018 to lease liabilities recognised at 1 January 2019. The Group has previously disclosed the minimum lease payments under non-cancellable operating leases based on contract terms. For the purposes of IFRS 16, the amount was revised based on the available extension options and management estimation of whether the Group is reasonably certain to exercise these options.

	$m
Operating non-cancellable lease commitments disclosed under IAS 17 at 31 December 2018	12
Adjustment to the expected lease term	38
Effect of discounting	(19)
Lease liabilities recognised at 1 January 2019	**31**

New accounting standards issued but not yet effective

The following standards and interpretations were in issue but not yet effective as of reporting date:

- IFRS 17 *Insurance Contracts*, effective for annual period beginning on or after 1 January 2021 with earlier application is permitted.
- Definition of a Business - Amendments to IFRS 3 *Business Combinations*, effective for annual periods beginning on or after 1 January 2020.
- Definition of Material – Amendments to IAS 1 *Presentation of Financial Statements* and IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*, effective for annual periods beginning on or after 1 January 2020.
- Amendments to IFRS 10 Consolidated Financial Statements and IAS 28 *Joint Ventures: Sale or Contribution of Assets between an Investor and its Associate or Joint Venture*, the effective date of the amendments has yet to be set; however, earlier application of the amendments is permitted.

The Group has determined these standards and interpretations are unlikely to have a significant impact on its consolidated financial statements or are not applicable to the Group.

2. Significant accounting policies

Basis of consolidation

Subsidiaries

The consolidated financial statements of the Group include the financial statements of the Company and its subsidiaries, from the date that control effectively commenced until the date that control effectively ceased. Control is achieved where the Company is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee.

Income and expenses of subsidiaries acquired or disposed of during the period are included in the consolidated income statement from the effective date of acquisition and up to the effective date of disposal, as appropriate.

When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with those used by the Group.

All intra-group balances, transactions and any unrealised profits or losses arising from intra-group transactions are eliminated on consolidation.

Changes to the Group's ownership interests that do not result in a loss of control over the subsidiaries are accounted for as equity transactions. The carrying amount of the Group's interests and Non-controlling interests are adjusted to reflect the change in their relative interests in the subsidiaries. Any difference between the amount by which the Non-controlling interest is adjusted and the fair value of the consideration paid or received is recognised directly in equity and attributed to the owners of the Company.

When the Group loses control of a subsidiary, the profit or loss on the disposal is calculated as the difference between 1) the aggregated fair value of the consideration received and the fair value of any retained interest and 2) the previous carrying amount of the assets (including goodwill), and liabilities of the subsidiary and Non-controlling interests.

Business combinations

IFRS 3 *Business Combination*s applies to a transaction or other event that meets the definition of a business combination. When acquiring new entities or assets, the Group applies judgement to assess whether the assets acquired and liabilities assumed constitute an integrated set of activities, whether the integrated set is capable of being conducted and managed as a business by a market participant, and thus whether the transaction constitutes a business combination, using the guidance provided in the standard. Acquisitions of businesses are accounted for using the acquisition method. The consideration for each acquisition is measured at the aggregate of the fair values (at the date of exchange) of assets given, liabilities incurred or assumed, and equity instruments issued by the Group in exchange for control of the acquiree. Acquisition-related costs are recognised in the consolidated income statement as incurred. Transaction costs incurred in connection with the business combination are expensed. Provisional fair values are finalised within 12 months of the acquisition date.

Where applicable, the consideration for the acquisition may include an asset or liability resulting from a contingent consideration arrangement. Contingent consideration is measured at its acquisition date fair value and included as part of the consideration transferred in a business combination. Subsequent changes in such fair values are adjusted against the cost of acquisition retrospectively with the corresponding adjustment against goodwill where they qualify as measurement period adjustments. Measurement period adjustments are adjustments that arise from additional information obtained during the measurement period about facts and circumstances that existed at the acquisition date. The measurement period may not exceed one year from the effective date of the acquisition. The subsequent accounting for contingent consideration that does not qualify for as a measurement period adjustment is based on how the contingent consideration is classified. Contingent consideration that is classified as equity is not subsequently remeasured. Contingent consideration that is classified as an asset or liability is remeasured at subsequent reporting dates in accordance with IAS 37 P*rovisions, Contingent Liabilities and Contingent Assets* or IFRS 9 *Financial Instruments* with the corresponding amount being recognised in profit or loss.

The identifiable assets acquired and the liabilities assumed are recognised at their fair value at the acquisition date, except that:

- Deferred tax assets or liabilities and liabilities or assets related to employee benefit arrangements are recognised and measured in accordance with IAS 12 *Income Taxes* and IAS 19 *Employee Benefits*, respectively;
- Liabilities or equity instruments related to share-based payment arrangements of the acquiree or share-based payment arrangements of the Group entered into to replace share-based payment arrangements of the acquiree are measured in accordance with IFRS 2 *Share-based Payment* at the acquisition date; and
- Assets (or disposal groups) that are classified as held for sale in accordance with IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations* are measured in accordance with that Standard.

Where a business combination is achieved in stages, the Group's previously held interests in the acquired entity are remeasured to fair value at the acquisition date (i.e. the date the Group attains control) and the resulting gain or loss, if any, is recognised in the consolidated income statement. Amounts arising from interests in the acquiree prior to the acquisition date that have previously been recognised in equity are reclassified to profit or loss, where such treatment would be appropriate if that interest was disposed of.

Non-current assets held for sale

Non-current assets (and disposal groups) classified as held for sale are measured at the lower of carrying amount and fair value less costs to sell.

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable and the asset (or disposal group) is available for immediate sale in its present condition.

Management must be committed to the sale which should be expected to qualify for recognition as a completed sale within one year from the date of classification.

When the Group is committed to a sale plan involving loss of control of a subsidiary, all of the assets and liabilities of that subsidiary are classified as held for sale when the criteria described above are met, regardless of whether the Group will retain a non-controlling interest in its former subsidiary after the sale.

Goodwill and goodwill impairment

Goodwill arising in a business combination is recognised as an asset at the date that control is acquired (the acquisition date). Goodwill is measured as the excess of the sum of the consideration transferred, the amount of any Non-controlling interests in the acquiree, and the fair value of the acquirer's previously held equity interest in the acquiree (if any) over the net of the acquisition date amounts of the identifiable assets acquired and the liabilities assumed.

If the Group's interest in the fair value of the acquiree's identifiable net assets exceeds the sum of the consideration transferred, the amount of any Non-controlling interests in the acquiree and the fair value of the acquirer's previously held equity interest in the acquiree (if any), the excess is recognised immediately in the consolidated income statement as a bargain purchase gain.

Goodwill is not amortised but is reviewed for impairment at least annually. For the purpose of impairment testing, goodwill is allocated to each of the Group's cash-generating units expected to benefit from the synergies of the combination. Cash-generating units to which goodwill has been allocated are tested for impairment annually, or more frequently when there is an indication that the unit may be impaired. If the recoverable amount of the cash-generating unit is less than its carrying amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then to the other assets of the unit pro-rata on the basis of the carrying amount of each asset in the unit. An impairment loss recognised for goodwill is not reversed in a subsequent period.

On disposal of a subsidiary, the attributable goodwill is included in the determination of the profit or loss on disposal.

Acquisition of mining licences

The acquisition of mining licences is often effected through a non-operating corporate entity. As these entities do not represent a business, it is considered that the transactions do not meet the definition of a business combination and, accordingly, the transaction is accounted for as the acquisition of an asset. The net assets acquired are accounted for at cost. Where asset acquisition is achieved in stages net assets acquired are accounted for as the sum of cost of the original interest acquired and the cost of additional interest acquired.

Investments in associates and joint ventures

An associate is an entity over which the Group has significant influence and that is neither a subsidiary nor an interest in a joint arrangement. Significant influence constitutes the power to participate in the financial and operating policy decisions of the investee but does not extend to a control or joint control over the enactment of those policies. The results and assets and liabilities of associates are incorporated in the consolidated financial statements using the equity method of accounting.

A joint arrangement is defined as an arrangement of which two or more parties have joint control. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

A joint operation is a joint arrangement in which the parties that share joint control have rights to the assets, and obligations for the liabilities, relating to the arrangement. This includes situations where the parties benefit from the joint activity through a share of the output, rather than by receiving a share of the results of trading. In relation to its interest in a joint operation, the Group recognises: its share of assets and liabilities; revenue from the sale of its share of the output and its share of any revenue generated from the sale of the output by the joint operation; and its share of expenses.

A joint venture is a joint arrangement in which the parties that share joint control have rights to the net assets of the arrangement and is accounted for using the equity accounting method.

When entering in a new joint arrangement, the Group applies judgement to assess whether the parties that have joint control over the arrangement have rights to the assets, and obligations for the liabilities, relating to the arrangement (joint operation) or rights to the net assets of the arrangement (joint venture), using the guidance provided in the standard. When a joint arrangement has been structured through a separate vehicle, consideration has been given to the legal form of the separate vehicle, the terms of the contractual arrangement and, when relevant, other facts and circumstances.

2. Significant accounting policies continued

Equity method of accounting

Under the equity method, an investment in an associate or a joint venture is initially recognised in the consolidated balance sheet at cost and adjusted thereafter to recognise the Group's share of the profit or loss and other comprehensive income of the investee. When the Group's share of the losses of an associate or a joint venture exceeds the Group's interest in that entity, the Group ceases to recognise its share of further losses. Additional losses are recognised only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the investee.

Any excess of the cost of acquisition over the Group's share of the net fair value of the identifiable assets, liabilities and contingent liabilities of an investee at the date of acquisition is recognised as goodwill, which is included within the carrying amount of the investment. Any excess of the Group's share of the net fair value of the identifiable assets, liabilities and contingent liabilities over the cost of acquisition, after reassessment, is recognised immediately in profit or loss.

The requirements of IAS 36 *Impairment of Assets* (IAS 36) are applied to determine whether it is necessary to recognise any impairment loss with respect to the Group's investments. Where an indicator of impairment exists or the carrying value of the asset contains goodwill with an indefinite useful life, the entire carrying amount of the investment (including goodwill) is tested for impairment in accordance with IAS 36 as a single cash generating unit through the comparison of its recoverable amount (the higher of value in use and fair value less costs to sell) with its carrying amount. Any impairment loss recognised forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognised in accordance with IAS 36.

When a Group entity transacts with its investees, profits and losses resulting from the transactions with the investee are recognised in the Group's consolidated financial statements only to the extent of interests in the associate or the joint venture that are not related to the Group.

Functional and presentation currency

The functional currency for each entity in the Group is determined as the currency of the primary economic environment in which it operates. For all Russian entities the functional currency is the Russian Rouble (RUB). The functional currency of the Group's entities located and operating in Kazakhstan (Varvarinskoye JSC, Bakyrchik Mining Venture LLC, Inter Gold Capital LLC, Komarovskoye Mining Company LLC) is the Kazakh Tenge (KZT). The functional currency of the Group's entity located and operating in Armenia (Kapan MPC CJSC) was the Armenian Dram (AMD). The functional currency of the parent company Polymetal International plc and its intermediate holding companies is the US Dollar.

The Group has chosen to present its consolidated financial statements in US Dollars ($), as management believes it is a more convenient presentation currency for international users of the consolidated financial statements of the Group as it is a common presentation currency in the mining industry. The translation of the financial statements of the Group entities from their functional currencies to the presentation currency is performed as follows:

- All assets and liabilities are translated at closing exchange rates at each reporting period end date;
- All income and expenses are translated at the average exchange rates for the periods presented, except for significant transactions that are translated at rates on the date of such transactions;
- Resulting exchange differences are recognised in other comprehensive income and presented as movements relating to the effect of translation to the Group's presentation currency within the Translation reserve in equity; and
- In the consolidated statement of cash flows, cash balances at the beginning and end of each reporting period presented are translated using exchange rates prevalent at those respective dates. All cash flows in the period are translated at the average exchange rates for the periods presented, except for significant transactions that are translated at rates on the date of transaction.

On the disposal of a foreign operation (i.e. a disposal of the Group's entire interest in a foreign operation, or a disposal involving loss of control over a subsidiary that includes a foreign operation, a disposal involving loss of joint control over a jointly controlled entity that includes a foreign operation, or a disposal involving loss of significant influence over an associate that includes a foreign operation), all of the exchange differences accumulated in equity in respect of that operation attributable to the owners of the Company are reclassified to profit or loss.

In the case of a partial disposal that does not result in the Group losing control over a subsidiary that includes a foreign operation, the proportionate share of accumulated exchange differences are re-attributed to Non-controlling interests and are not recognised in the consolidated income statement. For all other partial disposals (i.e. reductions in the Group's ownership interest in associates or jointly controlled entities that do not result in the Group losing significant influence or joint control), the proportionate share of the accumulated exchange differences is reclassified to the consolidated income statement.

Goodwill and fair value adjustments on identifiable assets and liabilities acquired arising on the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and translated at the rate of exchange prevailing at the end of each reporting period. Exchange differences arising are recognised in equity.

The Group translates its income and expenses in presentation currency on a monthly basis. During the years ended 31 December 2019 and 31 December 2018 exchange rates used in the preparation of the consolidated financial statements were as follows:

	Russian Rouble/US Dollar	Kazakh Tenge/US Dollar	Armenian Dram/US Dollar
31 December 2019			
Year ended	61.91	381.18	479.70
Average	64.74	382.84	480.53
Maximum monthly rate	67.35	389.23	488.33
Minimum monthly rate	62.94	377.87	476.00
31 December 2018			
Year ended	69.47	384.20	483.75
Average	62.68	344.76	483.03
Maximum monthly rate	67.66	372.41	486.30
Minimum monthly rate	56.79	320.70	480.45

The Russian Rouble, Kazakh Tenge and Armenian Dram are not freely convertible currencies outside the Russian Federation, Kazakhstan and Armenia, accordingly, any translation of Russian Rouble, Kazakh Tenge and Armenian Dram denominated assets and liabilities into U.S. Dollar for the purpose of the presentation of consolidated financial statements does not imply that the Group could or will in the future realise or settle in U.S. Dollars the translated values of these assets and liabilities.

Foreign currency transactions

Transactions in currencies other than an entity's functional currencies (foreign currencies) are recorded at the exchange rates prevailing on the dates of the transactions. All monetary assets and liabilities denominated in foreign currencies are translated at the exchange rates prevailing at the reporting date. Non monetary items carried at historical cost are translated at the exchange rate prevailing on the date of transaction. Non-monetary items carried at fair value are translated at the exchange rate prevailing on the date on which the most recent fair value was determined. Exchange differences arising from changes in exchange rates are recognised in the consolidated income statement. Exchange differences generated by monetary items that forms part of the intra-group net investment in the foreign operation are recognised in the consolidated financial statements within foreign currency translation reserve.

Property, plant and equipment

Mining assets

Mining assets include the cost of acquiring and developing mining assets and mineral rights. Mining assets are depreciated to their residual values using the unit-of-production method based on proven and probable ore reserves according to the JORC Code, which is the basis on which the Group's mine plans are prepared. Changes in proven and probable reserves are dealt with prospectively. Depreciation is charged on new mining ventures from the date that the mining asset is capable of commercial production. In respect of those mining assets whose useful lives are expected to be less than the life of the mine, depreciation over the period of the asset's useful life is applied.

Mineral rights for the assets under development are included within Exploration and development. When a production phase is started, mineral rights are transferred into Mining assets and are depreciated as described below.

Capital construction-in-progress

Capital construction-in-progress assets are measured at cost less any recognised impairment. Depreciation commences when the assets are ready for their intended use.

Exploration and development assets

Mineral exploration and evaluation costs, including geophysical, topographical, geological and similar types of costs, are capitalised into exploration assets if management concludes that future economic benefits are likely to be realised based on current internal assessment of exploration results and identified mineral resources.

Exploration and evaluation expenditures are transferred to development assets when commercially-viable reserves are identified, so that the entity first establishes proved and probable reserves in accordance with JORC Code and respective mining plan and model are prepared and approved. At the time of reclassification exploration and evaluation assets are assessed for impairment based on the economic models prepared.

The costs to remove any overburden and other waste materials to initially expose the ore body, referred to as stripping costs, are capitalised as a part of mining assets when these costs are incurred.

2. Significant accounting policies continued

Non-mining assets

Non-mining assets are depreciated to their residual values on a straight-line basis over their estimated useful lives. When parts of an item of property, plant and equipment are considered to have different useful lives, they are accounted for and depreciated separately. Depreciation methods, residual values and estimated useful lives are reviewed at least annually.

Estimated useful lives are as set out below:

Machinery and equipment	5–20 years
Transportation and other assets	3–10 years

Gains or losses on disposal of property, plant and equipment are determined by comparing the proceeds from disposal with the asset's carrying amount at the date. The gain or loss arising is recognised in the consolidated income statement.

Stripping costs

During the production phase of a mine when the benefit from the stripping activity is the improved access to a component of the ore body in future periods, the stripping costs in excess of the average ore to waste ratio for the life of mine of that component are recognised as a non-current asset. After initial recognition, the stripping activity asset is depreciated on a systematic basis (unit-of-production method) over the expected useful life of the identified component of the ore body made accessible as a result of the stripping activity.

Estimated ore reserves

Estimated proven and probable ore reserves reflect the economically recoverable quantities which can be legally recovered in the future from known mineral deposits. The Group's reserves are estimated in accordance with JORC Code.

Leases

The Group assesses whether a contract is or contains a lease, at inception of the contract. The Group recognised a rights-of-use asset and a corresponding lease liability with respect to all lease arrangements in which it is the lessee, except for short-term leases (defined as leases with a lease term of 12 months or less), leases of low value assets and leases for the purposes of mining and exploration activities, which fall out of the IFRS 16 scope. For these leases, the Group recognises the leases payments as operating expenses on a straight-line basis over the term of the lease.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted by using the rate implicit in the lease. If this rate cannot be readily determined, the Group uses its incremental borrowing rate.

The lease liability is presented as a separate line in the consolidated statement of financial position. The lease liability is subsequently measured by increasing the carrying amount to reflect interest on the lease liability based on the effective interest method and by reducing the carrying amount to reflect the lease payments made. The right-of-use assets comprise the initial measurement of the corresponding lease liability, lease payments made at or before the commencement day and any initial direct costs. They are subsequently measured at cost less accumulated depreciation and impairment losses and are presented as a separate line in the consolidated financial statements.

Right-of-use assets are depreciated over the shorter period of lease term and useful life of the underlying asset. The Group applies IAS 36 to determine whether a right-of-use asset is impaired and accounts for any identified impairment loss as described below.

Impairment of property, plant and equipment

An impairment review of property, plant and equipment is carried out when there is an indication that those assets have suffered an impairment loss or there are impairment reversal indicators. If any such indication exists, the carrying amount of the asset is compared to the estimated recoverable amount of the asset in order to determine the extent of the impairment loss or its reversal (if any). Where it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs.

Recoverable amount is the higher of fair value less costs to sell and value in use. The carrying amounts of all the cash-generating units are assessed against their recoverable amounts determined based on a fair value less costs to sell calculation. Fair value is based on the application of the Discounted Cash Flow Method (DCF) using post-tax cash flows. The DCF method is attributable to the development of proved and probable reserves and certain resources where a relevant resource-to-reserve conversion ratio can be reasonably applied.

If the recoverable amount of an asset (or cash generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or cash generating unit) is reduced to its recoverable amount. An impairment loss is recognised as an expense immediately in the consolidated income statement.

Where an impairment loss subsequently reverses, the carrying amount of the asset (or cash-generating unit) is increased to the revised estimate of its recoverable amount, but only to the extent that the increased carrying amount does not exceed the original carrying amount that would have been determined had no impairment loss been recognised in prior periods. Impairment loss may be subsequently reversed if there has been a significant change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognised.

A reversal of an impairment loss is recognised in the consolidated income statement immediately.

Inventories

Metal inventories

Inventories including refined metals, metals in concentrate and in process, doré and ore stockpiles are stated at the lower of production cost or net realisable value. Production cost is determined as the sum of the applicable expenditures incurred directly or indirectly in bringing inventories to their existing condition and location. Work in-process, metal concentrate, doré and refined metal are valued at the average total production costs at each asset's relevant stage of production (i.e. the costs are allocated proportionally to unified metal where unified metal is calculated based on prevailing market metal prices). Ore stockpiles are valued at the average cost of mining that ore. Where ore stockpiles and work in-process are not expected to be processed within 12 months, those inventories are classified as non-current.

Net realisable value represents the estimated selling price for that product based on forward metal prices for inventories which are expected to be realised within 12 months, and the flat long-term metal prices for non-current inventories, less estimated costs to complete production and selling costs.

Consumables and spare parts

Consumables and spare parts are stated at the lower of cost or net realisable value. Cost is determined on the weighted average moving cost. The portion of consumables and spare parts not reasonably expected to be used within one year is classified as a long-term asset in the Group's consolidated balance sheet. Net realisable value represents the estimated selling price less all estimated costs of completion and costs to be incurred in marketing, selling and distribution.

Financial instruments

Financial assets and financial liabilities are recognised when a Group entity becomes a party to the contractual provisions of the instrument.

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognised immediately in the consolidated income statement.

Trade receivables without provisional pricing that do not have a significant financing component (determined in accordance with IFRS 15 *Revenue from Contracts with Customers*) are not initially measured at fair value, rather they are initially measured at their transaction price.

Financial assets

All recognised financial assets are measured subsequently in their entirety at either amortised cost or fair value, depending on the classification of the financial assets. Financial assets are classified as either financial assets at amortised cost, at fair value through other comprehensive income (FVTOCI) or at fair value through profit or loss (FVTPL) depending upon the business model for managing the financial assets and the nature of the contractual cash flow characteristics of the financial asset.

Trade receivables without provisional pricing that do not contain provisional price features, loans and other receivables are held to collect the contractual cash flows and therefore are carried at amortised cost adjusted for any loss allowance. The loss allowance is calculated in accordance with the impairment of financial assets policy described below.

Trade receivables arising from sales of gold, silver, copper and zinc concentrates with provisional pricing features are exposed to future movements in market prices and have contractual cash flow characteristics that are not solely payments of principal and interest and are therefore measured at fair value through profit or loss and do not fall under the expected credit losses model (ECL) described below.

Effective interest rate method

The effective interest rate method is a method of calculating the amortised cost of a financial instrument and of allocating interest income or expense over the relevant period. The effective interest rate is the rate that discounts estimated future cash receipts or payments (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial instrument, or, where appropriate, a shorter period, to the net carrying amount on initial recognition.

2. Significant accounting policies continued

Impairment of financial assets

The Group recognises a loss allowance for expected credit losses on investments in debt instruments that are measured at amortised cost, trade and other receivables and contract assets, except for trade accounts receivable with provisional pricing. The amount of expected credit losses is updated at each reporting date to reflect changes in credit risk since initial recognition of the respective financial instrument.

The Group always recognises lifetime ECL for trade receivables and other receivable. The expected credit losses on these financial assets are estimated using a provision matrix based on the Group's historical credit loss experience, adjusted for factors that are specific to the debtors, general economic conditions and assessment of both the current as well as the forecast direction of conditions at the reporting date, including time value of money where appropriate.

For all other financial instruments, the Group recognises lifetime ECL when there has been a significant increase in credit risk since initial recognition. However, if the credit risk on the financial instrument has not increased significantly since initial recognition, the Group measures the loss allowance for that financial instrument at an amount equal to 12-month ECL.

Lifetime ECL represents the expected credit losses that will result from all possible default events over the expected life of a financial instrument. In contrast, 12-month ECL represents the portion of lifetime ECL that is expected to result from default events on a financial instrument that are possible within 12 months after the reporting date.

The Group writes off a financial asset when there is information indicating that the debtor is in severe financial difficulty and there is no realistic prospect of recovery, e.g. when the debtor has been placed under liquidation or has entered into bankruptcy proceedings, or in the case of trade receivables, when the amounts are over two years past due, whichever occurs sooner. Financial assets written off may still be subject to enforcement activities under the Group's recovery procedures, taking into account legal advice where appropriate. Any recoveries made are recognised in profit or loss.

Derecognition of financial assets

The Group derecognises a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If the Group neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognises its retained interest in the asset and an associated liability for amounts it may have to pay. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

Financial liabilities

All financial liabilities (including borrowings) are subsequently measured at amortised cost using the effective interest rate method.

Derecognition of financial liabilities

The Group derecognises financial liabilities when, and only when, the Group's obligations are discharged, cancelled or they expire. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable is recognised in the consolidated income statement.

Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation.

All other borrowing costs are recognised in the consolidated income statement in the period in which they are incurred.

Cash and cash equivalents

Cash and cash equivalents comprise cash balances, cash deposits and highly liquid investments with original maturities of three months or fewer, which are readily convertible to known amounts of cash and are subject to an insignificant risk of changes in value.

Provisions

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that the Group will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the reporting date, taking into account the risks and uncertainties surrounding the obligation. Where a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows.

Environmental obligations

An obligation to incur environmental restoration, rehabilitation and decommissioning costs arises when disturbance is caused by the development or ongoing production of mining assets. Such costs arising from the decommissioning of plant and other site preparation work, discounted to their net present value using a risk-free rate applicable to the future cash flows, are provided for and capitalised at the start of each project, as soon as the obligation to incur such costs arises. These costs are recognised in the consolidated income statement over the life of the operation, through the depreciation of the asset in the cost of sales line and the unwinding of the discount on the provision in the finance costs line. Costs for restoration of subsequent site damage which is created on an ongoing basis during production are provided for at their net present values and recognised in the consolidated income statement as extraction progresses.

Changes in the measurement of a liability relating to the decommissioning of plant or other site preparation work (that result from changes in the estimated timing or amount of the cash flow or a change in the discount rate), are added to or deducted from the cost of the related asset in the current period. If a decrease in the liability exceeds the carrying amount of the asset, the excess is recognised immediately in the consolidated income statement.

The provision for closure cost obligations is remeasured at the end of each reporting period for changes in estimates and circumstances. Changes in estimates and circumstances include changes in legal or regulatory requirements, increased obligations arising from additional mining and exploration activities, changes to cost estimates and changes to the risk free interest rate.

Employee benefit obligations

Remuneration paid to employees in respect of services rendered during a reporting period is recognised as an expense in that reporting period. The Group pays mandatory contributions to the state social funds, including the Pension Fund of the Russian Federation and Kazakhstan, which are expensed as incurred.

Taxation

Income tax expense represents the sum of the tax currently payable and deferred tax. Income taxes are computed in accordance with the laws of countries where the Group operates.

Current tax

The tax currently payable is based on taxable profit for the period. Taxable profit differs from profit as reported in the consolidated income statement because of items of income or expense that are taxable or deductible in other periods and items that are never taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the reporting date.

Deferred tax

Deferred tax is recognised on temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognised for all taxable temporary differences. Deferred tax assets are generally recognised for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilised. Such deferred tax assets and liabilities are not recognised if the temporary difference arises from goodwill or from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

Deferred tax liabilities are recognised for taxable temporary differences associated with investments in subsidiaries and associates, and interests in joint ventures, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognised to the extent that it is probable that there will be sufficient taxable profits against which to utilise the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realised, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the Group intends to settle its current tax assets and liabilities on a net basis.

Current and deferred tax

Current and deferred tax is recognised in the consolidated income statement, except when they relate to items that are recognised in the consolidated statement of comprehensive income or directly in equity, in which case, the current and deferred tax is also recognised in consolidated statement of comprehensive income or directly in equity respectively. Where current tax or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

2. Significant accounting policies continued

Uncertain tax positions

Provision for uncertain tax positions is recognised within current tax when management determines that it is probable that a payment will be made to the tax authority. For such tax positions the amount of the probable ultimate settlement with the related tax authority is recorded. When the uncertain tax position gives rise to a contingent tax liability for which no provision is recognised, the Group discloses tax-related contingent liabilities and contingent assets in accordance with IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*. As of 31 December 2019 management has identified a total exposure (covering taxes and related interest and penalties) of $100 million in respect of contingent liabilities (2018: $47 million), including $99 million related to income tax (2018: $46 million).

Revenue recognition

The Group has three major streams: the sale of gold and silver bullions and sale of copper, zinc, gold and silver concentrate and doré. Revenue is measured at the fair value of consideration to which an entity expects to be entitled in a contract with a customer in exchange for transferring promised goods, excluding amounts collected on behalf of third parties, such as value added tax (VAT). Group recognises revenue when it transfers control of a product or service to a customer.

Sale of gold and silver bullion

The Group processes doré produced in the Russian Federation into London Good Delivery Bars prior to sale. This final stage of processing is carried out on a toll-treatment basis at state-owned refineries. The Group sells gold and silver bullion to banks through long-term agreements. The sales price, as determined in the agreement, may be variable based upon the London Bullion Market Association (LBMA) spot or fixed price, however the Group does not enter into fixed price contracts. For domestic sales, control and title passes from the Group to the purchaser at the refinery gate with revenue recognised at that point. For export sales, once the gold and/or silver bars have been approved for export by Russian customs, they are then transported to the vault of the purchaser. Control and title passes and revenue is recognised at the point when the gold and/or silver bars are received by the purchaser.

Sales of copper, zinc, gold and silver concentrate

The Group sells copper, gold and silver concentrate under pricing arrangements where final prices are determined by quoted market prices in a period subsequent to the date of sale. Concentrate sales are initially recorded based on forward prices for the expected date of final settlement. Revenue is recorded at the time of shipment, when control pass to the buyer. Revenue is calculated based on the copper, gold and silver content in the concentrate and using the forward London Bullion Market Association (LBMA) or London Metal Exchange (LME) price to the estimated final pricing date, adjusted for the specific terms of the relevant agreement. Revenue is presented net of refining and treatment charges which are subtracted in calculating the amount to be invoiced.

Doré

Doré sales arrangements are similar to the copper, zinc, gold and silver concentrate pricing arrangements described above, with shorter quotational periods of up to 14 days.

Share-based compensation

The Group applies IFRS 2 *Share-based Payments* to account for share-based compensation. IFRS 2 requires companies to recognise compensation costs for share-based payments to employees based on the grant-date fair value of the award.

The fair value of the awards granted under Performance Share Plan (PSP) (as defined in the Remuneration report) is estimated using a Monte-Carlo model valuation (see Note 32).

Awards which are granted under Deferred Share Awards (DSA) plan and are released over a period of three years, are measured at share price at a grant date and are prorated across periods to the different vest dates (see Note 32).

The fair value of the awards granted is recognised as a general, administrative and selling expense over the vesting period with a corresponding increase in the share-based compensation reserve. Upon the exercise of the awards the amounts recognised within the share-based compensation reserve are transferred to stated capital account.

Earnings per share

Earnings per share calculations are based on the weighted average number of common shares outstanding during the period. Diluted earnings per share are calculated using the treasury stock method, whereby the proceeds from the potential exercise of dilutive stock options with exercise prices that are below the average market price of the underlying shares are assumed to be used in purchasing the Company's common shares at their average market price for the period.

3. Critical accounting judgements and key sources of estimation uncertainty

In the course of preparing the financial statements, management necessarily makes judgements and estimates that can have a significant impact on those financial statements. The determination of estimates requires judgements which are based on historical experience, current and expected economic conditions, and all other available information.

Estimates and underlying assumptions are reviewed on an ongoing basis, with revisions recognised in the period in which the estimates are revised and in the future periods affected. The judgements involving a higher degree of estimation or complexity are set out below.

Critical accounting judgement

The following is the critical accounting judgement (apart from judgements involving estimation which are dealt with separately below), made in the process of applying the Group's accounting policies during the year that has the most significant effect on the amounts recognised in the financial statements.

Recoverability of exploration and evaluation assets

Exploration and evaluation assets include mineral rights and exploration and evaluation costs, including geophysical, topographical, geological and similar types of costs. Exploration and evaluation costs are capitalised if management concludes that future economic benefits are likely to be realised and determines that economically viable extraction operation can be established as a result of exploration activities and internal assessment of mineral resources.

According to IFRS 6 *Exploration for and evaluation of mineral resources*, the potential indicators of impairment include: management's plans to discontinue the exploration activities, lack of further substantial exploration expenditure planned, expiry of exploration licences in the period or in the nearest future, or existence of other data indicating the expenditure capitalised is not recoverable. At the end of each reporting period, management assesses whether such indicators exist for the exploration and evaluation assets capitalised, which requires significant judgement.

As of 31 December 2019 total exploration and evaluation costs capitalised amount to $387 million (2018: $365 million) with the most significant asset of $314 million (2018: $290 million) attributable to the Prognoz silver property acquired during the year ended 31 December 2018.

Key sources of estimation uncertainty

The following are the sources of estimation uncertainty that carry the most significant risk of material effect on next year's accounts, being items where actual outcomes in the next 12 months could vary significantly from the estimates made in determining the reported amount of an asset or liability.

Cash flow projections for fair value accounting and impairment testing

Expected future cash flows used in DCF models are inherently uncertain and could materially change over time. They are significantly affected by a number of factors including ore reserves, together with economic factors such as commodity prices, exchange rates, discount rates and estimates of production costs and future capital expenditure.

- Ore reserves and mineral resources - Recoverable reserves and resources are based on the proven and probable reserves and resources in existence. Reserves and resources are incorporated in projected cash flows based on ore reserve statements and exploration and evaluation work undertaken by appropriately qualified persons (see below). Mineral resources, adjusted by certain conversion ratio, are included where management has a high degree of confidence in their economic extraction, despite additional evaluation still being required prior to meeting the required confidence to convert to ore reserves.
- Commodity prices – Commodity prices are based on latest internal forecasts, benchmarked against external sources of information. Polymetal currently use a flat real long-term gold and silver price of $1,200 per ounce (2018: $1,200) and $15 per ounce (2018: $15), respectively. Medium-term assumptions for the years 2020–2022 for gold and silver prices are of $1,400 per ounce (2018: $1,200) and $17 per ounce (2018: $15), respectively.
- Foreign exchange rates – Foreign exchange rates are based on latest internal forecasts, benchmarked with external sources of information for relevant countries of operation. Management have analysed RUB/$ rate movements for the year ended 31 December 2019. Long-term RUB/$ exchange rate is estimated at 65 RUB/$ (2018: 65 RUB/$), while medium term rate for the years 2020–2022 is estimated at 63 RUB/$ (2018: 65 RUB/$).
- Discount rates – The Group used a post-tax real discount rate of 9.0% (2018: 9.0%). Cash flow projections used in fair value less costs of disposal impairment models are discounted based on this rate.
- Operating costs, capital expenditure and other operating factors – Cost assumptions incorporate management experience and expectations, as well as the nature and location of the operation and the risks associated there with. Underlying input cost assumptions are consistent with related output price assumptions. Other operating factors, such as the timelines of granting licences and permits are based on management's best estimate of the outcome of uncertain future events at the balance sheet date.

No impairment for property, plant and equipment was recognised during the year ended 31 December 2019 as no indicators of impairment were identified. The sensitivities for goodwill impairment testing are disclosed in Note 21, and in the absence of indicators for impairment, these are not extended to impairment testing more generally. The sensitivity of items held at fair value is not material.

3. Critical accounting judgements and key sources of estimation uncertainty continued

Ore reserves

An ore reserve estimate is an estimate of the amount of product that can be economically and legally extracted from the Group's properties. Ore reserve estimates are used by the Group in the calculation of: depletion of mining assets using the units-of-production method; impairment charges and in forecasting the timing of the payment of decommissioning and land restoration costs. Also, for the purpose of impairment review and the assessment of the timing of the payment of decommissioning and land restoration costs, management may take into account mineral resources in addition to ore reserves where there is a high degree of confidence that such resources will be extracted.

In order to calculate ore reserves, estimates and assumptions are required about geological, technical and economic factors, including quantities, grades, production techniques, recovery rates, production costs, transport costs, commodity demand, commodity prices, discount rates and exchange rates. Estimating the quantity and/or grade of ore reserves requires the size, shape and depth of ore bodies to be determined by analysing geological data such as the logging and assaying of drill samples. This process may require complex and difficult geological judgements and calculations to interpret the data.

Ore reserve estimates may change from period to period as additional geological data becomes available during the course of operations or if there are changes in any of the aforementioned assumptions. Such changes in estimated reserves may affect the Group's financial results and financial position in a number of ways, including the following:

- Assets' carrying values due to changes in estimated future cash flows;
- Depletion charged in the consolidated income statement where such charges are determined by using the units-of-production method;
- Provisions for decommissioning and land restoration costs where changes in estimated reserves affect expectations about the timing of the payment of such costs;
- Carrying value of deferred tax assets and liabilities where changes in estimated reserves affect the carrying value of the relevant assets and liabilities; and
- Contingent consideration liabilities where these are determined by the future production levels.

Ore reserves are subject to the annual reestimation (please refer to the Reserves and Resources section of the Annual Report). Based on the ore reserves estimates as of 1 January 2020, the depreciation charge for the year ended 31 December 2019 would decrease by $24 million (2018: decrease by $20 million compared with using the ore reserves estimates as of 1 January 2019).

Recoverability of deferred tax assets

Deferred tax assets are reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised (Note 17). There is an application of judgement in assessing the amount, timing and probability of future taxable profits and repatriation of retained earnings. These factors affect the determination of the appropriate rates of tax to apply and the recoverability of deferred tax assets. These judgements are influenced, inter alia, by factors such as estimates of future production, commodity lines, operating costs, future capital expenditure and dividend policies. If actual results differ from these estimates or if these estimates must be adjusted in future periods, the financial position, results of operations and cash flows may be negatively affected.

Deferred tax assets arising from tax losses carried forward recognised as of 31 December 2019 amount to $136 million (2018: $167 million). Tax losses carried forward represent amounts available for offset against future taxable income generated by Mayskoye Gold Mining Company LLC, JSC South-Verkhoyansk Mining Company and JSC Polymetal Management (Russian Federation) and were recognised in full. Each legal entity within the Group represents a separate tax-paying component for income tax purposes. The tax losses of one entity cannot be used to reduce taxable income of other entities of the Group. The gross tax losses have an indefinite life. It is not practical to show the likely impact on the deferred tax balances of changes in corporate parameters because of number of legal entities with tax losses available and the different tax attributes applicable to each entity.

Uncertain tax positions

As of 31 December 2019 management has identified a total exposure (covering taxes and related interest and penalties) of $100 million in respect of contingent liabilities (2018: $47 million), including $99 million related to income tax (2018: $46 million).

Recoverability of stockpiles and work in-process

The assessment of the recoverability of metal inventories requires judgement both in terms of calculating expected costs to process and refine ore stock piles to produce concentrate or doré for sale, and in terms of estimating future prices to be realised on sale (Note 22). The Group uses survey and assay techniques to estimate quantities of the ore stockpiled and ore stacked in heap leach pads, as well as the recoverable metal in the material and work in-process. The amount of the recoverable metals, that will be available for sale, is determined based on technological recoveries, which are established for each deposit and extraction technology. Changes in these estimates can result in a change in mine operating costs of future periods and carrying amounts of inventories.

During the year ended 31 December 2019 the Group provided for the net realisable value of metal inventories in the amount of $19 million (year ended 31 December 2018: write-down of $21 million).

The amount of inventories held at net realisable value at 31 December 2019 is $44 million (31 December 2018: $99 million).

The key assumptions used in determining the net realisable value of inventories at 31 December 2019 are consistent with those used for goodwill impairment testing as described on page 169.

Valuation of contingent consideration payable

The Group has recorded contingent consideration liabilities of $66 million as at 31 December 2019 (2018: $54 million) related to various acquisitions made, as set out in Note 29 to the financial statements. Various estimates must be made when determining the value of contingent consideration to be recognised at each balance sheet date. The assumptions made are consistent with those made for impairment testing purposes (see above), and additional assumptions are included in Note 29. Significant changes in assumptions could cause an increase, or reduction, in the amount of contingent consideration payable, with a resulting charge or credit in the consolidated income statement.

4. Acquisitions and disposals

Summary of acquisitions and disposals in consolidated statement of profit and loss

	Note	**2019 $m**	2018 $m
Revaluation of initial share on business combination			
Nezhda		–	20
Amikan		–	21
Total		**–**	**41**
Loss on disposal of subsidiaries, net			
Kapan		(13)	–
Khakanja		–	(63)
Other		(3)	9
Total		**(16)**	**(54)**
Write-down of assets held for sale			
Irbychan	5	(28)	–
Total		**(28)**	**–**

(a) Year ended 31 December 2019

Kapan mine disposal

In October 2018 the Group entered into a legally binding agreement to sell its 100% interest in the Kapan mine to Chaarat Gold Holdings Limited (Chaarat), an unrelated party. The disposal was effected as a part of the programme to dispose of smaller short-lived assets. Kapan was the major part of the Armenia cash-generating unit and the Armenia operating segment, and therefore as of 31 December 2018 it met the definition of a discontinued operation and an asset held for sale in accordance with IFRS 5 *Assets Held for Sale and Discontinued Operations*. As of 31 December 2018 the proceeds from the Kapan disposal were expected to approximate to its carrying amount, so no impairment loss was recognised following the classification of this operation as held for sale.

On 30 January 2019, the transaction was completed. The total consideration received amounted to $55 million, subject to working capital adjustments. $10 million was settled in Chaarat's convertible notes maturing in 2021 and the remaining $45 million was received in cash.

The notes conversion price was set at $0.25 million per 527,871 ordinary shares, which equalled 21,114,840 Chaarat ordinary shares. The convertible notes met the definitions of financial asset under IFRS 9 Financial instruments and therefore were to be classified as a financial asset in their entirety. The convertible notes failed the solely payments of principal and interest (SPPI) criterion and were accounted for at fair value through profit and loss. The fair value of the convertible bonds as of date of transaction approximated to $11 million.

As part of the transaction an intercompany loan of $11 million outstanding as of 31 December 2018 and 30 January 2019 was assigned to Chaarat for no consideration.

On 29 July 2019, the Company signed a settlement agreement with Chaarat delivering the convertible bonds back to Chaarat and receiving its 14,638,020 newly issued ordinary shares, as well as finalising the working capital adjustment at nil and releasing Polymetal from warranties and indemnities under the sale and purchase agreement. The adjustment to the consideration resulting from this settlement agreement amounts to $5 million, being the realised loss on conversion of the convertible notes. The total loss on disposal of Kapan recognised during the year ended 31 December 2019 therefore amounted to $13 million.

Charaat shares received are quoted shares and accounted for at fair value through profit and loss and are presented within trade receivables and other financial instruments (Note 23).

4. Acquisitions and disposals continued

The net assets of the disposed subsidiary at the date of disposal were as follows:

	$m
Property, plant and equipment	40
Deferred tax asset	7
Inventories	17
Cash and cash equivalents	2
Other current assets	7
Accounts payable and accrued liabilities	(9)
Net assets disposed of	**64**
Cash consideration received	45
Fair value of the convertible bonds received	11
Working capital adjustment	–
Adjustment per settlement agreement	(5)
Total consideration received	51
Loss on disposal of a subsidiary	**13**

As of 31 December 2018 Kapan was classified as held for sale and discontinued operation in accordance with IFRS 5 Assets held for sales and discontinued operations. The major classes of assets and liabilities held by Kapan and their carrying values as of 31 December 2018 approximate to the carrying values as of the disposal date. The results of the Kapan operations are shown as discontinued operations in the consolidated income statement and statement of consolidated statement of cash flows and are presented in Note 5.

In December 2019 the Group disposed of the remaining entities of the Armenia segment. These entities had a net asset value of $4 million and were disposed of for $1 million resulting in a loss on disposal of $3 million.

Amikan purchase price allocation

On October 2018 the Group acquired an additional 31.7% stake in GRK Amikan LLC ("Amikan"), the licence holder for the Veduga property. Veduga is a high-grade refractory gold deposit with reserves of 1.4 Moz of gold at 4.8 g/t and additional mineral resources of 0.4 Moz at 4.9 g/t.

Following this acquisition, the Group increased its overall ownership in the Veduga gold deposit to 74.3%.

Polymetal has been a partial owner of the property since 2006 with the original 50% stake acquired through the JV with AngloGoldAshanti and subsequently diluted by external equity financing. From 2012 the Group's equity ownership was 42.65% and it exercised significant influence over the property. The investment was accounted for using the equity method of accounting. In 2012–2018 2,882 kt of ore with the average grade of 3.84 g/t containing 356 koz of gold was extracted from the open-pit mine at Veduga. Historically ore was sold to multiple processing plants including Varvara.

As the Amikan operations represent an integrated set of activities with a focus on mining and extraction of precious metals, it was determined that it meets the definition of a business pursuant to IFRS 3 and that it should be fair value accounted for using the acquisition method.

Consideration transferred

The total consideration comprised $21.5 million, payable by issuing 2,456,049 Polymetal new ordinary shares. The number of issued shares has been determined by dividing $19.7 million by $8.036, the spot price of ordinary shares of the Company on the Main Market of the London Stock Exchange as at market close on 10 October 2018 in U.S. Dollars. The fair value of the consideration transferred was determined based on the 12 October 2018 closing share spot price of $8.78.

As the Group obtained control over the Amikan gold property, which was previously considered a joint venture operation that constituted a business, the Group's previously recognised share of the business subject to joint control was remeasured in accordance with IFRS 3. The remeasurement resulted in a fair value gain of $21 million as of the acquisition date, and was recognised in the income statement.

The non-controlling interest (25.69% ownership interest in Amikan) recognised at the acquisition date was measured as the proportionate share in the recognised amounts of the acquiree's identifiable net assets and amounted to $17 million.

Assets acquired and liabilities recognised at the date of acquisition

The initial accounting of the Amikan acquisition was provisionally determined at 31 December 2018 based on the management's best estimate. The purchase price allocation was updated based on the updated DCF model. The updated model includes the processing of ore which was written off on preliminary purchase price allocation, resulting in an increase of inventories fair value balance and decrease of amount allocated to mineral rights.

The amounts recognised in respect of the identifiable assets acquired and liabilities assumed and its reconciliation to the provisional accounting are set out in the table below:

Assets acquired and liabilities recognised at the date of acquisition

	Provisional amounts previously reported $m	Adjustments $m	Adjusted amounts $m
Property, plant and equipment	101	(7)	94
Inventories	5	7	12
Cash and cash equivalents	4	–	4
Other current assets	(1)	–	(1)
Environmental obligations	(1)	–	(1)
Borrowings	(26)	–	(26)
Deferred tax liabilities	(14)	–	(14)
Fair value of the net assets acquired	**68**	**–**	**68**
Consideration transferred			
Fair value of shares issued	22	–	22
Initial investment in JV as of acquisition date	8	–	8
Revaluation gain	21	–	21
Non-controlling interest at fair value	17	–	17
Total consideration	**68**	**–**	**68**
Cash and cash equivalents acquired	**4**	**–**	**4**

The effect of the finalisation of the Amikan acquisition accounting on the Group balance sheet is as follows:

	31 December 2018 (previously stated) $m	Fair value adjustments $m	31 December 2018 (restated) $m
Property, plant and equipment	2,426	(7)	2,419
Non-current inventories	95	7	102
Change in equity	**–**	**–**	**–**

(b) Year ended 31 December 2018

During the year ended 31 December 2018 the Group completed the Amikan, Prognoz silver property and Nezhda gold property business combinations, and the Tarutin asset swap which was accounted for as the asset acquisition.

4. Acquisitions and disposals continued

The purchase price allocations for Prognoz and Nezhda were finalised in 2018, while the Amikan purchase price allocation was finalised during 2019 as discussed above. The amounts recognised in respect of the identifiable assets acquired and liabilities assumed are set out in the table below:

	Prognoz $m	Nezhda $m	Amikan (restated) $m	Tarutin $m	Total $m
Property, plant and equipment	290	322	94	3	709
Inventories	–	3	12	–	15
Cash and cash equivalents	–	–	4	–	4
Other current assets	2	10	(1)	–	11
Accounts payable and accrued liabilities	–	(10)	–	–	(10)
Environmental obligations	–	(1)	(1)	–	(2)
Borrowings	(42)	(78)	(26)	(3)	(149)
Deferred tax liabilities	(50)	(38)	(14)	–	(102)
Fair value of the net assets acquired	**200**	**208**	**68**	**–**	**476**
Fair value of shares issued	200	136	22	–	358
Cash consideration paid	–	10	–	–	10
Contingent consideration payable	14	–	–	–	14
Option fair value	–	11	–	–	11
Initial investment in JV as of acquisition date	10	31	8	–	49
Less consideration allocated to the Shareholders' loan	(24)	–	–	–	(24)
Revaluation gain	–	20	21	–	41
Non-controlling interest at fair value	–	–	17	–	17
Total consideration	**200**	**208**	**68**	**–**	**476**

The summary of transactions is discussed in detail below.

Prognoz silver property acquisition

In April 2018 the Group completed the acquisition of the Prognoz silver deposit in Yakutia, Russia ("Prognoz"), through two consecutive deals. On 13 April 2018 the Group completed the acquisition of the 45% stake from Polar Acquisition Ltd (PAL) for consideration paid through the issue of 6,307,000 Polymetal new ordinary shares and on 23 April 2018 acquired the remaining 50% a stake from the private investor for consideration paid by issuing 14,152,668 new ordinary shares of the Company. The initial 5% interest in Prognoz was previously accounted for as a joint venture under IFRS 11 *Joint Arrangements*.

In addition to the share considerations paid to PAL and the private investor Polymetal also committed to pay a net smelter return ("NSR") royalties as described in Note 29.

As a result of the transactions, Polymetal consolidated its 100% stake in Prognoz.

The Group determined that it obtained control over Prognoz as of 23 April 2018.

Prognoz is the largest undeveloped primary silver deposit in Eurasia with JORC-compliant Indicated and Inferred Resources, estimated by the Group in 2018 of 256 Moz at 789 g/t silver equivalent. As the Prognoz operations represent an integrated set of activities with a focus on exploration, it was determined that it meets the definition of a business pursuant to IFRS 3 and that it should be fair value accounted for using the acquisition method.

Consideration transferred

The fair value of the newly issued 6,307,000 ordinary shares issued as part of the consideration paid for Prognoz to PAL was determined based on the spot price at the acquisition date, being $9.63, and it was valued at $61 million.

The fair value of the newly issued 14,152,668 ordinary shares issued as part of the consideration paid for Prognoz to the private investor was determined based on the spot price at the acquisition date, being $9.83, and it was valued at $139 million, with $24 million allocated to the acquired shareholders' loan.

The NSR royalties meet definition of contingent consideration and are accounted for at their fair value at the acquisition date as the described in Note 29. The input assumption applied were as follows.

The fair value of the NSR payable to PAL was determined using the long-term silver price assumption of $15 per ounce. At the acquisition date, the fair value of the contingent consideration was estimated at $9 million.

The fair value of the NSR payable to the private investor was estimated at $5 million by applying the key assumptions set out below:

Silver price volatility	31.69%
Silver price as of acquisition date/long-term real price per ounce	$16.94/$15
Discount rate	9%

Nezhda gold property acquisition

In 2018 Polymetal consolidated 100% interest in Nezhdaninskoye gold deposit ("Nezhda") in Yakutia, Russia, by acquiring 7% for $8 million in cash as part of the shareholder agreement signed in July 2017 and by exercising a call option to acquire the remaining 75.3% stake for consideration of $146 million, payable in cash and Polymetal shares. The completion of the sale, including the exercise of the call option were subject to approval by the Russian Federal Government's Commission on Foreign Investments into Companies of Strategic Importance.

The initial 17.7% interest in Nezhda was previously accounted for as a joint venture under IFRS 11 *Joint Arrangements*. In November 2018, Polymetal received all necessary regulatory approvals and completed the acquisition of the remaining 82.3% stake in Nezhda from entities owned by Ivan Kulakov.

The Group determined that it obtained control over the Nezhda gold property on 26 November 2018.

As Nezhda operations represent an integrated set of activities with a focus on exploration, it was determined that it meets the definition of a business pursuant to IFRS 3 and that it should be fair value accounted for using the acquisition method.

Consideration transferred

The fair value of the 13,486,579 ordinary shares issued as part of the consideration paid was determined based on the spot price at the acquisition date, being $10.07, and it was valued at $136 million. The fair value of the Call Option described above represents part of the consideration transferred and comprised $11 million as of acquisition date.

As the Group obtained control over the Nezhda gold property, which was previously considered a joint venture operation that constituted a business, the Group's previously recognised share of the business subject to joint control was remeasured in accordance with IFRS 3. The remeasurement resulted in a fair value gain of $20 million as of the acquisition date, and was recognised in the income statement.

Tarutin asset swap

In April 2018, Polymetal reached an agreement with the Russian Copper Company ("RCC") for an all-share exchange of Polymetal's Tarutin property in Russia for 85% of RCC's East Tarutin property in Kazakhstan. As a result of the transaction, Polymetal received 85% of Tarutinskoye LLP, the licence holder for the copper-gold East Tarutin deposit located in Kazakhstan. In return, Polymetal transferred 100% of Vostochny Basis LLC, the licence holder for the copper-gold Tarutin deposit located in the Russian Federation. The transaction represents an asset swap and does not entail any additional payments or deferred considerations.

East Tarutin is a copper-gold deposit located in proximity to the Varvara processing plant and is expected to source the ore for further processing at the Varvara hub.

The acquired company did not meet the definition of a business pursuant to IFRS 3 and the transaction represents the acquisition of mineral rights through a non-operating corporate entity and does not give rise to goodwill or a gain. Based on IFRS 3 guidance the carrying amount of the assets given up represent the cost of the investment in East Tarutin (Kazakhstan). As a result the Group purchased mineral rights of $3 million.

Khakanja disposal

In December 2018 the Group disposed of its Khakanja operations (Okhotskaya Mining and Exploration Company LLC), which comprise the 600 Ktpa processing plant, related infrastructure at the Khakanja mine, and old stockpiles at Khakanja, Avlayakan and Ozernoye deposits with current ore reserves of approximately 0.1 Moz of GE, as well as exploration properties of Kundumi and Mevachan. The total consideration for Khakanja comprised $30 million of which $5 million was received in cash and $25 million represented relinquished bank debt. Simultaneously the Group disposed of its Okhotskiy port assets, which were previously accounted for as a part of Khakanja operations, for a consideration of $2 million paid in cash. The disposal of Khakanja operations was effected as part a strategy of selling smaller short-lived assets.

4. Acquisitions and disposals continued

The net assets of the disposed subsidiary at date of disposal were as follows:

	$m
Property, plant and equipment	19
Inventories	40
Other current assets (net)	21
Environmental obligations	(4)
Borrowings	(25)
Fair value of the net assets disposed	**51**
Cash consideration received	7
Loss on disposal	**(44)**
Cumulative exchange differences in foreign operation recycled from translation reserve	(19)
Total loss on disposal	**(63)**

The results of Khakanja operations are shown as discontinued operations in the consolidated income statement and statement of consolidated statement of cash flows (Note 5).

During 2018 the Group disposed of its minor subsidiaries Svetlobor platinum exploration project and Kirankan gold deposit, as well as its interest in the joint venture Aktogai Mys LLC (Dolinnoye exploration licence in Kazakhstan).

5. Assets held for sale and discontinued operations

Irbychan Gold

In November 2019 the Group carved out a group of assets with an aggregate carrying value of $41 million, including the Omolon low grade ore stock pile and related mining and exploration licenses, into a separate legal entity. The group plans to dispose of this group of assets through a sale to a third party in the next 3–6 months, as a part of the Group strategy to dispose of smaller and low-margin assets. A non-binding agreement for the sale was reached with the third party in December 2019, but has not yet been formalised.

The group of assets meets the definition of a disposal group as per IFRS 5 *Assets held for sale and discontinued operations*, so it is presented separately in the balance sheet as of 31 December 2019. Irbychan Gold does not represent a separate major line of business or geographical area of operations or a part of a single co-ordinated plan to dispose of such, thus it was concluded that it doesn't meet the definition of discontinued operation. The expected sale price approximates to $13 million. The disposal group as a whole is subject to the measurement requirements of IFRS 5, so as of 31 December 2019 was measured at the lower of its carrying amount and fair value less costs to sell, and the Group recognised a loss of $28 million as detailed below:

	31 December 2019		
	Carrying value $m	Write-down $m	Fair value less cost to sell $m
Property, plant and equipment	11	(9)	2
Non-current inventories	31	(20)	11
Other assets and liabilities	1	–	1
Total assets held for sale	**43**	**(29)**	**14**
Deferred tax liability	(1)	1	–
Environmental obligations	(1)	–	(1)
Total liabilities associated with assets classified as held for sale	**(2)**	**1**	**(1)**
Net assets classified as held for sale	**41**	**(28)**	**13**

Kapan and Khakanja operations disposal

Kapan (see also Note 4) was identified as the major part of the Armenia cash generating unit and the Armenia operating segment, and therefore at 31 December 2018 it met the definition of a discontinued operation and an asset held for sale in accordance with IFRS 5 *Assets held for sale and discontinued operations*.

In December 2018 the Group disposed of its Khakanja operations, which was identified as a separate cash generating unit and a separate major line of business, included in the Khabarovsk segment, and therefore at 31 December 2018 it also met the definition of a discontinued operation in accordance with IFRS 5 *Assets held for sale and discontinued operations*.
The results of Khakanja operations and Kapan are shown as discontinued operations in the consolidated income statement and statement of consolidated statement of cash flows:

	Year ended 31 December 2019		Year ended 31 December 2018		
	Kapan $m	**Total $m**	Kapan $m	Khakanja $m	Total $m
Revenue	5	**5**	61	115	**176**
Expenses, net	(5)	**(5)**	(81)	(86)	**(167)**
Profit before income tax	**–**	**–**	**(20)**	**29**	**9**
Attributable income tax expense	–	**–**	(2)	(4)	**(6)**
Profit for the financial period	**–**	**–**	**(22)**	**25**	**3**
Loss on disposal of discontinued operations	(13)	**(13)**	–	(63)	**(63)**
Attributable tax expense	–	**–**	–	–	**–**
Net loss attributable to discontinued operations (attributable to equity shareholders of the Parent)	**(13)**	**(13)**	**(22)**	**(38)**	**(60)**
Net cash generated by/(used in)					
Operating activities	–	**–**	5	15	**20**
Investing activities	–	**–**	(10)	(8)	**(18)**
Financing activities	–	**–**	–	25	**25**

As of 31 December 2018 Kapan was classified as held for sale and discontinued operation in accordance with IFRS 5 *Assets held for sales and discontinued operations*. The major classes of assets and liabilities held by Kapan and their carrying values as of 31 December 2018 approximate to the carrying values as of disposal date.

The major classes of assets and liabilities held by Kapan which comprise operations classified as held for sale as of 31 December 2018 are as follows:

	$m
Property, plant and equipment	40
Deferred tax assets	7
Inventories	16
Cash and cash equivalents	3
Other current assets	8
Total assets classified as held for sale	**74**
Accounts payable and accrued liabilities	(8)
Total liabilities associated with assets classified as held for sale	**(8)**

.

6. Segment information

The Group has identified five reportable segments:

- Magadan (Omolon Gold Mining Company LLC, Magadan Silver JSC, Mayskoye Gold Mining Company LLC);
- Ural (Gold of Northern Urals CJSC);
- Khabarovsk (Albazino Resources Ltd, Amur Hydrometallurgical Plant LLC, Svetloye LLC; GRK Amikan LLC);
- Kazakhstan (Varvarinskoye JSC, Komarovskoye Mining Company LLC, Bakyrchik Mining Venture LLC);
- Yakutia (South-Verkhoyansk Mining Company JSC, Prognoz Silver LLC).

As the Group disposed of its Kapan operations in 2019 the entire Armenia segment is disclosed as discontinued operations.

Reportable segments are determined based on the Group's internal management reports, which are separated based on the Group's geographical structure. Minor companies and activities (management, exploration, purchasing and other companies) which do not meet the reportable segment criteria are disclosed within corporate and other segment. Each segment is engaged in gold, silver or copper mining and related activities, including exploration, extraction, processing and reclamation. The Group's segments are based in the Russian Federation and Kazakhstan.

From 1 January 2019 management identified the Yakutia segment, comprising the Nezhda development and the Prognoz exploration operations, acquired during the year ended 31 December 2018, which were previously reported within Corporate and other. From 1 January 2019 management presents GRK Amikan LLC, which was previously reported within Corporate and other, within the Khabarovsk segment, as the Veduga ore is processed at Amur Hydrometallurgical Plant LLC. The comparative information has been restated on a consistent basis.

The measure which management and the Chief Operating Decision Maker (the CODM) use to evaluate the performance of the Group is segment Adjusted EBITDA, which is an Alternative Performance Measure (APM). For more information on the APMs used by the Group, including definitions, please refer to page 206.

The accounting policies of the reportable segments are consistent with those of the Group's accounting policies under IFRS.

Revenue shown as Corporate and other comprises, principally, intersegment revenue relating to the supply of inventories, spare parts and fixed assets, and rendering management services to the Group's production entities. Intersegment revenue is recognised based on costs incurred plus a fixed margin basis. From 1 January 2019 the Group reports revenue and cost of sales, pertaining to its productions entities, net of any intersegmental revenue and cost of sales, related to the intercompany sales of ore and concentrates, as well as intercompany smelting services, as this presentation is more meaningful from management and forecasting perspective. The comparative information has been restated on a consistent basis.

Business segment current assets and liabilities, other than current inventory, are not reviewed by the CODM and therefore are not disclosed in these consolidated financial statements. The segment adjusted EBITDA reconciles to the profit before income tax as follows:

Year ended 31 December 2019 ($m)	Kazakhstan	Khabarovsk	Magadan	Ural	Yakutia	Total continuing segments	Total discontinued operations	Corporate and other	Intersegment operations and balances	Total
Revenue from external customers	681	569	842	149	–	2,241	5	–	–	2,246
Intersegment revenue	–	–	–	–	–	–	–	249	(249)	–
Cost of sales, excluding depreciation, depletion and write-down of inventory to net realisable value	207	228	476	37	–	948	4	155	(164)	943
Cost of sales	295	278	582	51	–	1,206	4	155	(164)	1,201
Depreciation included in Cost of sales	(87)	(49)	(92)	(7)	–	(235)	–	–	–	(235)
Write-down of metal inventory to net realisable value	–	–	(12)	(7)	–	(19)	–	–	–	(19)
Write-down of non-metal inventory to net realisable value	–	–	1	–	–	1	–	–	–	1
Rehabilitation expenses	(1)	(1)	(3)	–	–	(5)	–	–	–	(5)
General, administrative and selling expenses, excluding depreciation, amortisation and share based compensation	14	17	31	4	8	74	1	102	(15)	162
General, administrative and selling expenses	16	18	32	4	8	78	1	118	(15)	182
Depreciation included in SGA	(2)	(1)	(1)	–	–	(4)	–	(4)	–	(8)
Share-based compensation	–	–	–	–	–	–	–	(12)	–	(12)
Other operating expenses excluding additional tax charges	12	15	27	5	(1)	58	–	9	(1)	66
Other operating expenses	12	18	26	5	(1)	60	–	9	(1)	68
Bad debt and expected credit loss allowance	–	(1)	–	–	–	(1)	–	–	–	(1)
Additional tax charges/fines/penalties	–	(2)	1	–	–	(1)	–	–	–	(1)
Share of income of associates and joint ventures	–	–	–	–	–	–	–	–	–	–
Adjusted EBITDA	**448**	**309**	**308**	**103**	**(7)**	**1,161**	**–**	**(17)**	**(69)**	**1,075**
Depreciation expense	89	50	93	7	–	239	–	4	–	243
Rehabilitation expenses	1	1	3	–	–	5	–	–	–	5
Write-down of non-metal inventory to net realisable value	–	–	(1)	–	–	(1)	–	–	–	(1)
Write-down of metal inventory to net realisable value	–	–	12	7	–	19	–	–	–	19
Share-based compensation	–	–	–	–	–	–	–	12	–	12
Bad debt and expected credit loss allowance	–	1	–	–	–	1	–	–	–	1
Additional tax charges/fines/penalties	–	2	(1)	–	–	1	–	–	–	1
Operating profit / (loss)	**358**	**255**	**202**	**89**	**(7)**	**897**	**–**	**(33)**	**(69)**	**795**
Net foreign exchange gains										(36)
Loss on disposal of subsidiaries										(16)
Write-down of assets held for sale										(28)
Change in fair value of contingent consideration liability										(23)
Finance income										7
Finance costs										(81)
Profit before tax										**618**
Income tax expense										(135)
Profit for the financial period										**483**
Current metal inventories	95	132	230	30	–	487	–	1	(45)	443
Current non-metal inventories	26	41	114	5	10	196	–	17	(12)	201
Non-current segment assets:						–				
Property, plant and equipment, net	815	584	394	18	817	2,628	–	182	–	2,810
Goodwill	–	–	16	–	–	16	–	–	–	16
Non-current inventory	41	24	47	3	–	115	–	–	(1)	114
Investments in associates	–	–	–	–	–	–	–	2	–	2
Total segment assets	**977**	**781**	**801**	**56**	**827**	**3,442**	**–**	**202**	**(58)**	**3,586**
Additions to non-current assets:										
Property, plant and equipment	89	114	84	5	155	447	–	23	–	470
Acquisition of subsidiaries	–	–	–	–	–	–	–	–	–	–

6. Segment information (continued)

Year ended 31 December 2018 ($m)	Kazakhstan	Khabarovsk	Magadan	Ural	Yakutia	Total reportable segments	Total discontinued operations	Corporate and other	Intersegment operations and balances	Total
Revenue from external customers	272	575	725	134	–	1,706	176	–	–	1,882
Intersegment revenue (restated)	–	–	–	–	–	–	–	235	(235)	–
Cost of sales, excluding depreciation, depletion and write-down of inventory to net realisable value	121	245	392	38	–	796	107	144	(158)	889
Cost of sales (restated)	159	298	487	47	–	991	119	144	(158)	1,096
Depreciation included in Cost of sales	(37)	(53)	(71)	(9)	–	(170)	(13)	–	–	(183)
Write-down of metal inventory to net realisable value	–	–	(21)	–	–	(21)	–			(21)
Write-down of non-metal inventory to net realisable value	(1)	–	(2)	–	–	(3)	1			(2)
Rehabilitation expenses	–	–	(1)	–	–	(1)	–	–	–	(1)
General, administrative and selling expenses, excluding depreciation, amortisation and share-based compensation	15	15	32	4	2	68	11	95	(14)	160
General, administrative and selling expenses	16	15	32	4	2	69	11	109	(14)	175
Depreciation included in SGA	(1)	–	–	–	–	(1)	–	(2)	–	(3)
Share-based compensation	–	–	–	–	–	–	–	(12)	–	(12)
Other operating expenses excluding additional tax charges	8	7	23	5	–	43	3	6	–	52
Other operating expenses	8	7	23	5	–	43	28	4	–	75
Lichkvaz exploration expenses and mineral rights write-off	–	–	–	–	–	–	(24)	–	–	(24)
Additional tax chargers/fines/penalties	–	–	–	–	–	–	(1)	2	–	1
Share of income of associates and joint ventures	–	–	–	–	–	–	–	(1)	–	(1)
Adjusted EBITDA	**128**	**308**	**278**	**87**	**(2)**	**799**	**55**	**(11)**	**(63)**	**780**
Depreciation expense	38	53	71	9	–	171	13	2	–	186
Rehabilitation expenses	–	–	1	–	–	1	–	–	–	1
Lichkvaz exploration expenses and mineral rights write-off						–	24			24
Write-down of non-metal inventory to net realisable value	1	–	2	–	–	3	(1)			2
Write-down of metal inventory to net realisable value	–	–	21	–	–	21	–	–	–	21
Share-based compensation	–	–	–	–	–	–	–	12	–	12
Additional tax chargers/fines/penalties	–	–	–	–	–	–	1	(2)	–	(1)
Operating profit / (loss)	**89**	**255**	**183**	**78**	**(2)**	**603**	**18**	**(23)**	**(63)**	**535**
Net foreign exchange gains										(40)
Revaluation of initial on business combination										41
Loss on disposal of subsidiaries										(54)
Change in fair value of contingent consideration liability										7
Finance income										8
Finance costs										(71)
Profit before tax										**426**
Income tax expense										(71)
Profit for the financial period										**355**
Current metal inventories	57	95	194	33	–	379	–	–	(11)	368
Current non-metal inventories	22	36	99	5	5	167	–	9	(7)	169
Non-current segment assets:	–	–	–	–	–	–	–	–	–	–
Property, plant and equipment, net	823	486	364	20	585	2,278	3	145	–	2,426
Goodwill	–	–	15	–	–	15	–	–	–	15
Non-current inventory	22	15	65	2	–	104	–	–	(2)	102
Investments in associates	–	–	–	–	–	–	–	2	–	2
Total segment assets	**924**	**632**	**737**	**60**	**590**	**2,943**	**3**	**156**	**(20)**	**3,082**
Additions to non-current assets:										
Property, plant and equipment	134	104	74	5	21	338	15	24	–	377
Acquisition of subsidiaries	–	94	–	–	612	706	–	3	–	709

7. Revenue

Continuing operations

	Year ended 31 December 2019				Year ended 31 December 2018			
	Volume shipped (unaudited)	**Volume payable (unaudited)**	**Average price ($ per oz/t payable) (unaudited)**	**$m**	Volume shipped (unaudited)	Volume payable (unaudited)	Average price ($ per oz/t payable) (unaudited)	$m
Gold (thousand ounces)	1,410	1,363	1,377	1,878	1,120	1,096	1,227	1,345
Silver (thousand ounces)	22,507	22,076	15.8	349	24,110	23,735	14.8	351
Copper (tonnes)	2,864	2,705	5,176	14	1,932	1,827	5,474	10
Total				**2,241**				**1,706**

Total continuing and discontinued operations

	Year ended 31 December 2019				Year ended 31 December 2018			
	Volume shipped (unaudited)	**Volume payable (unaudited)**	**Average price ($ per oz/t payable) (unaudited)**	**$m**	Volume shipped (unaudited)	Volume payable (unaudited)	Average price ($ per oz/t payable) (unaudited)	$m
Gold (thousand ounces)	1,413	1,366	1,377	1,882	1,224	1,198	1,226	1,468
Silver (thousand ounces)	22,538	22,107	15.8	349	26,118	25,675	14.8	380
Copper (tonnes)	3,016	2,842	5,278	15	3,542	3,348	5,675	19
Zinc (tonnes)	(8)	(7)	–	–	6,625	5,625	2,667	15
Total				**2,246**				**1,882**

Geographical analysis of revenue by destination is presented below:

	Continuing operations Year ended		Total continuing and discontinued operations Year ended	
	31 December 2019 $m	31 December 2018 $m	**31 December 2019 $m**	31 December 2018 $m
Sales within the Russian Federation	1,044	1,038	1,044	1,153
Sales to Kazakhstan	655	338	655	338
Sales to East Asia	472	245	472	263
Sales to Europe	70	85	75	128
Total	**2,241**	**1,706**	**2,246**	**1,882**

Included in revenues for the year ended 31 December 2019 are revenues which arose from the sales to the Group's largest customers, whose contribution to the Group's revenue exceeded 10% of the total revenue. In 2019 revenues from such customers amounted to $659 million, $439 million, $338 million and $266 million respectively (2018: $490 million, $228 million, $203 million and $173 million, respectively).

Revenue is derived principally from the sale of gold and silver bullions, copper, gold and silver concentrate and doré. The Group sells gold and silver bullions to banks through long-term agreements. The sales price, as determined in the agreement, is based on the spot London Bullion Market Association (LBMA) price. Copper, zinc, gold and silver concentrate and doré are sold under pricing arrangements where final prices are determined by quoted market prices in a period subsequent to the date of sale.

The Group enters into prepaid bullion sales arrangements, which are settled solely through bullion shipments and are priced based on the spot London Bullion Market Association (LBMA) price, prevailing of the date of the respective shipment. The arrangements fall under IFRS 15 *Revenue from Contracts with Customers* and respective advances received represent contract liabilities, which are presented on the face of the balance sheet as prepayments received. There were no prepayments received under such arrangements as of 31 December 2019 (31 December 2018: $100 million). As of 31 December 2019 contract obligations related to the concentrate sales amount to $5 million and were accounted for as prepayments received (31 December 2018: nil).

7. Revenue continued

Presented below is an analysis per revenue stream:

	Magadan $m	Khabarovsk $m	Ural $m	Kazakhstan $m	Discontinued operations $m	Total $m
Year ended 31 December 2019						
Bullions	412	513	149	–	–	1,074
Concentrate	430	34	–	245	5	714
Doré	–	22	–	436	–	458
	842	**569**	**149**	**681**	**5**	**2,246**
Year ended 31 December 2018						
Bullions	362	563	134	–	115	1,174
Concentrate	363	12	–	107	61	543
Doré	–	–	–	165	–	165
	725	**575**	**134**	**272**	**176**	**1,882**

8. Cost of sales

	Continuing operations Year ended		Total continuing and discontinued operations Year ended	
	31 December 2019 $m	31 December 2018 $m	**31 December 2019 $m**	31 December 2018 $m
Cash operating costs				
On-mine costs (Note 9)	485	417	488	482
Smelting costs (Note 10)	359	314	360	349
Purchase of ore and concentrates from third parties	59	66	59	78
Purchase of ore from related parties (Note 33)	–	22	–	22
Mining tax	115	87	115	97
Total cash operating costs	**1,018**	**906**	**1,022**	**1,028**
Depreciation and depletion of operating assets (Note 11)	250	210	250	228
Rehabilitation expenses	5	1	5	1
Total costs of production	**1,273**	**1,117**	**1,277**	**1,257**
Increase in metal inventories	(98)	(174)	(98)	(187)
Write-down of metal inventories to net realisable value (Note 22)	19	21	19	21
Write-down of non-metal inventories to net realisable value (Note 22)	(1)	4	(1)	2
Idle capacities and abnormal production costs	4	3	4	3
Total	**1,197**	**971**	**1,201**	**1,096**

Mining tax includes royalties payable in Russian Federation, Kazakhstan and Armenia. Mining tax in Russian Federation and Kazakhstan is calculated based on the value of the precious metals extracted in the period. This value is usually determined based on the realised selling price of precious metals or, in case if there were no sales during the period, cost of production of metals extracted (Russian Federation) or the average market price (Kazakhstan) during the reporting period. The royalty payable in Armenia was calculated as a percentage of actual sales during the reporting period.

Idle capacities and abnormal production costs were expensed as incurred and relate to idle capacities when processing plants are stopped for general maintenance.

9. On-mine costs

	Continuing operations Year ended		Total continuing and discontinued operations Year ended	
	31 December 2019 $m	31 December 2018 $m	**31 December 2019 $m**	31 December 2018 $m
Services	229	185	230	222
Labour	132	122	133	133
Consumables and spare parts	119	107	120	121
Other expenses	5	3	5	6
Total (Note 8)	**485**	**417**	**488**	**482**

10. Smelting costs

	Continuing operations Year ended		Total continuing and discontinued operations Year ended	
	31 December 2019 $m	31 December 2018 $m	**31 December 2019 $m**	31 December 2018 $m
Consumables and spare parts	155	143	155	159
Services	139	109	140	118
Labour	63	60	63	70
Other expenses	2	2	2	2
Total (Note 8)	**359**	**314**	**360**	**349**

11. Depletion and depreciation of operating assets

	Continuing operations Year ended		Total continuing and discontinued operations Year ended	
	31 December 2019 $m	31 December 2018 $m	**31 December 2019 $m**	31 December 2018 $m
On-mine	188	154	188	169
Smelting	62	56	62	59
Total (Note 8)	**250**	**210**	**250**	**228**

Depreciation of operating assets excludes depreciation relating to non-operating assets (included in general, administrative and selling expenses) and depreciation related to assets employed in development projects where the charge is capitalised. Depreciation expense, which is excluded from the Group's calculation of Adjusted EBITDA (see Note 6), also excludes amounts absorbed into unsold metal inventory balances.

12. General, administrative and selling expenses

	Continuing operations Year ended		Total continuing and discontinued operations Year ended	
	31 December 2019 $m	31 December 2018 $m	**31 December 2019 $m**	31 December 2018 $m
Labour	136	120	137	127
Services	8	14	8	16
Share-based compensation (Note 32)	12	12	12	12
Depreciation	8	3	8	3
Other	17	15	17	17
Total	181	164	182	175
Including				
Mine site expenses	78	69	79	80
Corporate head office expenses	103	95	103	95
Total	**181**	**164**	**182**	**175**

13. Other operating expenses, net

	Continuing operations Year ended		Total continuing and discontinued operations Year ended	
	31 December 2019 $m	31 December 2018 $m	**31 December 2019 $m**	31 December 2018 $m
Lichkvaz exploration expenses and mineral rights write-off	–	–	–	24
Social payments	24	14	24	16
Exploration expenses	19	12	19	13
Provision for investment in Special Economic Zone	11	11	11	11
Taxes, other than income tax	11	13	11	13
Other expenses	3	(3)	3	(2)
Total	**68**	**47**	**68**	**75**

For the operations held in the Special Economic Zone of the Russian Far East, Omolon Gold Mining Company LLC and JSC Magadan Silver are entitled to the decreased statutory income tax rate of 17%, as well as decreased mining tax rate (paying 60% of standard mining tax rates). In return for obtaining this tax relief the members of the regional free Economic Zone are obliged to invest 50% of their tax savings each year in the Special Economic Zone Development Programme, amounting to $11 million in 2019 (2018: $11 million).

During the year ended 31 December 2019 exploration expenses include write downs of $9, which were previously within exploration and development assets (2018: nil).

Operating cash flow spent on exploration activities amounts to $10 million (2018: $12 million).

14. Employee costs

	Continuing operations Year ended		Total continuing and discontinued operations Year ended	
	31 December 2019 $m	31 December 2018 $m	**31 December 2019 $m**	31 December 2018 $m
Wages and salaries	313	278	314	303
Social security costs	71	68	71	72
Share-based compensation	12	12	12	12
Total employee costs	**396**	**358**	**397**	**387**
Reconcilation:				
Less: employee costs capitalised	(43)	(35)	(43)	(37)
Less: employee costs absorbed into unsold metal inventory balances	(15)	(30)	(15)	(32)
Employee costs included in cost of sales	**338**	**293**	**339**	**318**

The weighted average number of employees during the year ended 31 December 2019 and year ended 31 December 2018 was:

	Year ended	
	31 December 2019	31 December 2018
Magadan	4,023	4,048
Khabarovsk	2,305	2,807
Kazakhstan	2,472	2,163
Armenia	69	953
Ural	752	809
Yakutia	478	412
Corporate and other	1,712	1,528
Total	**11,811**	**12,720**
Less discontinued operations	69	1,539
Total continuing operations	**11,742**	**11,181**

Compensation of key management personnel is disclosed within Note 33.

15. Auditor's remuneration

	Year ended	
	31 December 2019 $m	31 December 2018 $m
Fees payable to the auditor and their associates for the audit of the Company's Annual Report		
United Kingdom	0.35	0.36
Overseas	0.74	0.72
Audit of the Company's subsidiaries	0.06	0.05
Total audit fees	**1.15**	**1.13**
Audit-related assurance services	0.47	0.46
Total audit and half-year review fees	**1.62**	**1.59**
Other services	0.03	0.08
Total non-audit fees	0.03	0.08
Total fees	**1.65**	**1.67**
Non-audit fees as % of audit and half-year review fees	**2%**	**5%**

16. Finance costs

	Year ended	
	31 December 2019 $m	31 December 2018 $m
Interest expense on borrowings	72	67
Unwinding of discount on lease liabilities (Note 20)	3	–
Unwinding of discount on environmental obligations (Note 26)	4	3
Unwinding of discount on contingent consideration liability (Note 29)	2	1
Total	**81**	**71**

No significant amount of finance cost related to the discontinued operations in either year.

During the years ended 31 December 2019 interest expense on borrowings excludes borrowing costs capitalised in the cost of qualifying assets of $9 million (2018: $11 million). These amounts were calculated based on the Group's general borrowing pool and by applying an effective interest rate of 4.26% (2018: 4.19%) to cumulative expenditure on such assets.

17. Income tax

The amount of income tax expense for the years ended 31 December 2019 and 31 December 2018 recognised in profit and loss is as follows:

	Continuing operations Year ended		Total continuing and discontinued operations Year ended	
	31 December 2019 $m	31 December 2018 $m	**31 December 2019 $m**	31 December 2018 $m
Current income taxes	101	101	101	108
Deferred income taxes	34	(36)	34	(37)
Total	**135**	**65**	**135**	**71**

A reconciliation between the reported amounts of income tax expense attributable to income before income tax is as follows:

	Year ended	
	31 December 2019 $m	31 December 2018 $m
Profit before income tax	**618**	**426**
Theoretical income tax expense at the tax rate of 20%	124	85
Effect of Special Economic Zone and Regional Investment project decreased tax rates	(34)	(27)
Effect of different tax rates of subsidiaries operating in other jurisdictions	5	7
Revaluation of initial share on business combination	–	(8)
Change in fair value of contingent consideration liability	4	1
Current year losses not recognised and losses previously recognised written-off	6	1
Non-deductible interest expense	14	14
Non-taxable consolidation adjustments on disposal of subsidiaries	3	3
Adjustments in respect of prior periods	(1)	(5)
Other non-taxable income and non-deductible expenses	14	–
Total income tax expense	**135**	**71**

The actual tax expense differs from the amount which would have been determined by applying the statutory rate of 20% for the Russian Federation and Kazakhstan to profit before income tax as a result of the application of relevant jurisdictional tax regulations, which disallow certain deductions which are included in the determination of accounting profit. These deductions include share-based payment expenses, social related expenditures and other non-production costs, certain general and administrative expenses, financing expenses, foreign exchange related and other costs.

Omolon Gold Mining Company LLC and Magadan Silver JSC are entitled to the decreased statutory income tax rate of 17% for the operations held in the Special Economic Zone of the Russian Far East, the rate of 17% was used in calculation of income tax provision and deferred tax positions for those entities. Svetloye LLC is subject to tax relief as Regional Investment Project and is entitled to the statutory income tax rate of 0% up to 2021. Amursk Hydrometallurgical Plant LLC is entitled to income tax rate of 0% up to 2023 and tax rate of 10% in 2024–2028.

Tax exposures recognised in income tax

During the year ended 31 December 2019 and the year ended 31 December 2018 no individual significant exposures were identified as probable and therefore provided for. Management has identified a total exposure in respect of contingent liabilities (Note 28) (covering taxes and related interest and penalties) of approximately $99 million being uncertain tax positions (31 December 2018: $46 million) which relate to income tax. Management do not believe that it is probable that material tax will be payable in respect of these items.

Income tax amounts included in other comprehensive income

An analysis of tax by individual item presented in the Consolidates statement of comprehensive income is presented below:

	Year ended	
	31 December 2019 $m	31 December 2018 $m
Net foreign exchange gains/(losses) on net investment in foreign operation		
Current tax expense	5	(1)
Deferred tax expense	–	(1)
Total income tax recognised in other comprehensive income	**5**	**(2)**

Current and deferred tax assets recognised within other comprehensive income relates to the tax losses originated by foreign currency exchange losses, allowable for tax purposes and generated by monetary items that forms part of the intragroup net investment in the foreign operation. These foreign currency exchange losses are recognised in the consolidated financial statements within foreign currency translation reserve.

Deferred taxation

Deferred taxation is attributable to the temporary differences that exist between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for tax purposes.

The following are the major deferred tax liabilities and assets recognised by the Group and movements thereon during the reporting period.

	Year ended	
	31 December 2019 $m	31 December 2018 $m
Deferred tax liabilities	(196)	(152)
Deferred tax assets	73	73
Total	**(123)**	**(79)**

17. Income tax continued

Deferred tax assets and liabilities are offset where the Group has a legally enforceable right to do so. The following analysis shows deferred tax balances presented for financial reporting purposes:

	Property, plant, and equipment and other non-current assets $m	Trade and other payables $m	Tax losses $m	Other $m	Total $m
At 1 January 2018	**(159)**	**8**	**126**	**9**	**(16)**
Charge to income statement	(5)	(3)	46	(1)	37
Acquisitions (Note 4)	(124)	–	20	2	(102)
Disposals (Note 4)	1	–	(2)	2	1
Reclassified as held for sales (Note 5)	(2)	–	–	(5)	(7)
Recognised in other comprehensive income	–	–	–	(1)	(1)
Exchange differences	34	(1)	(23)	(1)	9
At 31 December 2018	**(255)**	**4**	**167**	**5**	**(79)**
Charge to income statement	(5)	11	(40)	–	(34)
Reclassified as held for sales (Note 5)	–	–	–	1	1
Exchange differences	(21)	1	9	–	(11)
At 31 December 2019	**(281)**	**16**	**136**	**6**	**(123)**

The Group believes that the recoverability of the recognised deferred tax asset (DTA) of $136 million at 31 December 2019 (2018: $167 million), which is related to the tax losses carried forward, is more likely than not based upon expectations of future taxable income in the Russian Federation and Kazakhstan.

From 1 January 2019 in accordance with Russian Federation tax law regarding loss carryforwards, loss carryforwards are limited to 50% of taxable profit in tax years throughout 2021. From 2022 the limitation will expire and it will be possible to fully utilise loss carryforwards against the corporate tax base in a given year and losses incurred from 2007 can be carried forward for an indefinite period until fully utilised.

Losses incurred in certain taxable entities in recent years have created a history of losses as of 31 December 2019. The Group has concluded that there is sufficient evidence to overcome the recent history of losses based on forecasts of sufficient taxable income in the carry-forward period.

Tax losses carried forward represent amounts available for offset against future taxable income generated predominantly by Mayskoye Gold Mining Company LLC, Varvarinskoye JSC, Bakyrchik Mining Venture LLC and JSC South-Verkhoyansk Mining Company. Each legal entity within the Group represents a separate tax-paying component for income tax purposes. The tax losses of one entity cannot be used to reduce taxable income of other entities of the Group.

The Group's estimate of future taxable income is based on established proven and probable reserves which can be economically developed. The related detailed mine plans and forecasts provide sufficient supporting evidence that the Group will generate taxable earnings to be able to fully realise its net DTA even under various stressed scenarios. The amount of the DTA considered realisable, however, could be reduced in the near term if estimates of future taxable income during the carry forward period are reduced due to delays in production start dates, decreases in ore reserve estimates, increases in environmental obligations, or reductions in precious metal prices.

No deferred tax asset has been recognised in respect of $112 million (2018: $109 million) as it is not considered probable that there will be future taxable profits against which the losses can be utilised.

The deferred tax liabilities for taxes that would be payable on the unremitted earnings of certain of the Group subsidiaries have not been recognised as the Group has determined that the undistributed profit of its subsidiaries will not be distributed in the foreseeable future. The temporary differences associated with investments in subsidiaries, for which deferred tax liabilities have not been recognised, amount to $3,363 million (2018: $2,459 million).

18. Dividends

Dividends recognised during the years ended 31 December 2019 and 31 December 2018 are detailed in the below:

	Dividends				
	Cents per share	$m	Deducted from the equity during the period	Proposed in relation to the period	Paid in
Final dividend 2017	30	136	2018	2017	May 2018
Interim dividend 2018	17	77	2018	2018	September 2018
Final dividend 2018	31	146	2019	2018	May 2019
Interim dividend 2019	20	94	2019	2019	September 2019
Special dividend 2019	20	94	2020	2019	March 2020
Final dividend 2019	42	197	n/a	2019	n/a
Total dividends for the year ended 31 December 2018			**213**	**223**	**213**
Total dividends for the year ended 31 December 2019			**240**	**385**	**240**

19. Property, plant and equipment

	Development assets $m	Exploration assets $m	Mining assets $m	Non-mining assets $m	Capital construction in-progress $m	Total $m
Cost						
Balance at 31 December 2017	**655**	**150**	**2,024**	**61**	**276**	**3,166**
Additions	34	45	162	6	130	377
Transfers	(453)	(54)	724	1	(218)	–
Reclassified as held for sale	–	–	(47)	(2)	(12)	(61)
Change in environmental obligations	–	–	2	–	(3)	(1)
Acquisitions restated (Note 4)	297	291	102	–	19	709
Eliminated on disposal of subsidiary	(4)	(13)	(61)	(2)	(3)	(83)
Disposals and write-offs including fully depleted mines	(24)	–	(140)	(4)	–	(168)
Translation to presentation currency	(39)	(54)	(417)	(10)	(39)	(559)
Balance at 31 December 2018 (restated)	**466**	**365**	**2,349**	**50**	**150**	**3,380**
Additions	84	43	174	5	164	470
Transfers	(12)	(50)	111	10	(59)	–
Reclassified as held for sale	–	(9)	–	(6)	–	(15)
Change in environmental obligations	–	–	15	–	1	16
Acquisitions (Note 4)	–	–	–	–	–	–
Disposals and write-offs including fully depleted PPE	(5)	(4)	(177)	(2)	(2)	(190)
Translation to presentation currency	56	42	181	7	20	306
Balance at 31 December 2019	**589**	**387**	**2,653**	**64**	**274**	**3,967**

19. Property, plant and equipment continued

	Development assets $m	Exploration assets $m	Mining assets $m	Non-mining assets $m	Capital construction in-progress $m	Total $m
Accumulated depreciation, amortisation						
Balance at 31 December 2017	**–**	**–**	**(1,081)**	**(31)**	**–**	**(1,112)**
Charge for the period	–	–	(254)	(5)	–	(259)
Reclassified as held for sale	–	–	20	1	–	21
Eliminated on disposal of subsidiary	–	–	56	2	–	58
Disposals and write-offs including fully depleted mines	–	–	135	1	–	136
Translation to presentation currency	–	–	190	5	–	195
Balance at 31 December 2018	**–**	**–**	**(934)**	**(27)**	**–**	**(961)**
Charge for the period	–	–	(270)	(9)	–	(279)
Reclassified as held for sale	–	–	–	4	–	4
Eliminated on disposal of subsidiary	–	–	–	–	–	–
Disposals and write-offs including fully depleted mines	–	–	175	1	–	176
Translation to presentation currency	–	–	(95)	(2)	–	(97)
Balance at 31 December 2019	**–**	**–**	**(1,124)**	**(33)**	**–**	**(1,157)**
Net book value						
31 December 2018 (restated)	**466**	**365**	**1,415**	**23**	**150**	**2,419**
31 December 2019	**589**	**387**	**1,529**	**31**	**274**	**2,810**

The balance of as 31 December 2018 was restated as a result of finalisation of the Amikan acquisition accounting (Note 4).

Mining assets, exploration and development assets at 31 December 2019 included mineral rights with net book value which amounted to $1,258 million (31 December 2018: $1,216 million) and capitalised stripping costs with net book value of $109 million (31 December 2018: $76 million). Mineral rights of the Group comprise assets acquired upon acquisition of subsidiaries.

No property, plant and equipment was pledged as collateral at 31 December 2019 or at 31 December 2018.

20. Leases

Movements of the right-of-use assets for the year ended 31 December 2019 are as follow:

	31 December 2019 $m
Right-of-use assets	
Balance at 1 January 2019	**31**
Additions	8
Depreciation charge for the period	(4)
Disposals	(9)
Accumulated depreciation of assets disposed	1
Translation to presentation currency	4
Balance at 31 December 2019	**31**

The most significant leases of the Group are office leases.

Movements of the lease liabilities for the year ended 31 December 2019 are as follow:

Lease liabilities	31 December 2019 $m
Balance at 1 January 2019	**(31)**
New lease contracts	(8)
Unwinding of discount on lease liabilities	(3)
Repayments of lease liability	6
Termination of lease contracts	8
Translation to presentation currency	(4)
Total lease liabilities	**(32)**
Less current portion of lease liabilities	**(3)**
Total non-current lease liabilities	**(29)**

The Group excluded the following lease agreements from the right-of-use assets and lease liabilities and continues to account those lease agreements as lease expenses:

- Lease agreements with variable payments;
- Lease agreements of land plots to explore for or use minerals and similar non-generative resources;
- Short-term lease agreements that expire within 12 months from the date of initial application;
- Lease agreements of low value assets (of $5,000 or less).

Amounts recognised in profit and loss for the year ended 31 December 2019 are as follow:

	Year ended 31 December 2019 $m
Expenses relating to lease exemptions	(2)
Unwinding of discount on lease liabilities	(3)
Depreciation of right-of-use assets	(4)
Total lease expenses	**(9)**

21. Goodwill

Goodwill has been allocated for impairment testing purposes to the following cash-generating units:

	Year ended	
	31 December 2019 $m	31 December 2018 $m
Cost and Accumulated impairment losses		
At 1 January	**15**	**18**
Translation effect	1	(3)
At 31 December	**16**	**15**
Mayskoye	12	11
Dukat	4	4
Total	**16**	**15**

The carrying amount of goodwill is reviewed annually to determine whether it is in excess of its recoverable amount. The recoverable amount of the cash-generating unit is determined based on a fair value less costs to sell calculation. Fair value is based on the application of the Discounted Cash Flow Method (DCF) using post-tax cash flows. The DCF method is attributable to the development of proved and probable reserves. The impairment testing procedure and related assumptions are described in detail in “Key sources of estimation uncertainty” section above.

21. Goodwill continued

Sensitivity analysis

For Dukat and Mayskoye management has performed an analysis as to whether a reasonably possible adverse change to any of the key assumptions would lead to impairment.

The following scenarios were considered as reasonably possible and were used for this sensitivity analysis:

- 10% simultaneous decrease in gold and silver prices over the life of mine;
- 10% appreciation in RUB/$ exchange rates;
- 10% increase in operating expenses over the life of mine; and
- 0.5% increase in the discount rate applied.

Each of the sensitivities above has been determined by assuming that the relevant key assumption moves in isolation, and without regard to potential mine plan changes and other management decisions which would be taken to respond to adverse changes in existing management projections. No scenarios would result in impairment of any of the recognised goodwill.

22. Inventories

	Year ended	
	31 December 2019 $m	31 December 2018 restated $m
Inventories expected to be recovered after twelve months		
Ore stock piles	78	75
Consumables and spare parts	36	27
Total non-current inventories	**114**	**102**
Inventories expected to be recovered in the next twelve months		
Ore stock piles	214	174
Copper, gold and silver concentrate	131	116
Work in-process	75	55
Doré	10	14
Metal for refining	12	9
Refined metals	1	1
Total metal inventories	**443**	**369**
Consumables and spare parts	201	168
Total current inventories	**644**	**537**

Write-downs of metal inventories to net realisable value

The Group recognised the following write-downs to net realisable value of its metal inventories:

	Year ended 31 December 2019			Year ended 31 December 2018
	Ural $m	**Magadan $m**	**Total operating segments $m**	Total operating segments $m
Ore stock piles	–	(12)	(12)	(9)
Ore in heap leach piles	(7)	(3)	(10)	(9)
Copper, gold and silver concentrate	–	3	3	(3)
Total	**(7)**	**(12)**	**(19)**	**(21)**

The key assumptions used as at 31 December 2019 in determining net realisable value of inventories (including the commodity price assumptions for long-term stockpiles) were consistent with those used in the goodwill impairment review (Note 3). For short-term metal inventories applicable quoted forward prices as of 31 December 2019 were used: gold and silver price of $1,540 per ounce (2018: $1,300) and $18 per ounce (2018: $16), respectively.

The write-downs presented above exclude the Irbychan Gold ore impairment, which is recognised as part of the write down of assets held for sale to their fair value (Note 5).

During the year ended 31 December 2019 the Group recognised a reversal of previous write-down of consumables and spare parts inventory of $1 million (year ended 31 December 2018: write-down of $2 million).

The amount of inventories held at net realisable value at 31 December 2019 is $44 million (31 December 2018: $99 million).

23. Trade receivables and other financial instruments

	Year ended	
	31 December 2019 $m	31 December 2018 $m
Receivables from provisional copper, gold and silver concentrate sales	25	60
Other receivables	16	22
Less: Allowance for doubtful debts	(2)	(3)
Total trade and other receivables	**39**	**79**
Chaarat shares	7	–
Short-term loans provided to third parties	2	2
Total other short-term financial instruments	**9**	**2**
Total	**48**	**81**

The average credit period on sales of copper, gold and silver concentrate at 31 December 2019 was 13 days (2018: 22 days). No interest is charged on trade receivables. The Group's doubtful debt relates to its non-trade receivables, which are fully impaired.

24. Cash and cash equivalents

		Year ended	
		31 December 2019 $m	31 December 2018 $m
Bank deposits	– U.S. Dollar	179	361
	– other currencies	16	7
Current bank accounts	– U.S. Dollar	55	1
	– other currencies	3	10
Total		**253**	**379**

Bank deposits as at 31 December 2019 are mainly presented by the U.S. Dollar deposits, bearing an average interest rate of 1.31% per annum and KZT demand deposits bearing an interest rate of 7.52% (2018: U.S. Dollar deposits, bearing an average interest rate of 3% per annum and KZT demand deposits, bearing an interest rate of 5%).

25. Borrowings

Borrowings at amortised cost:

		Actual interest rate at		31 December 2019			31 December 2018		
	Type of rate	31 Dec 2019	31 Dec 2018	Current $m	Non-current $m	Total $m	Current $m	Non-current $m	Total $m
Secured loans from third parties									
U.S. Dollar denominated	floating	3.61%	n/a	–	75	75	–	–	–
U.S. Dollar denominated	fixed	4.00%	4.00%	136	236	372	64	372	436
Total				**136**	**311**	**447**	**64**	**372**	**436**
Unsecured loans from third parties									
U.S. Dollar denominated	floating	3.48%	4.35%	26	350	376	11	940	951
U.S. Dollar denominated	fixed	4.25%	4.56%	52	849	901	34	470	504
Euro denominated	fixed	2.85%	2.85%	–	8	8	8	–	8
Total				**78**	**1,207**	**1,285**	**53**	**1,410**	**1,463**
				214	**1,518**	**1,732**	**117**	**1,782**	**1,899**

Bank loans

The Group has a number of borrowing arrangements with various lenders. These borrowings consist of unsecured and secured loans and credit facilities denominated in U.S. Dollars. Where security is provided it is in form of a pledge of revenue from certain sales agreements.

Movements in borrowings are reconciled as follows:

	Year ended	
	31 December 2019 $m	31 December 2018 $m
At 1 January	**1,899**	**1,456**
Borrowings obtained	1,244	1,697
Borrowings acquired	–	26
Borrowings disposed	–	(25)
Repayments of borrowings	(1,410)	(1,254)
Net foreign exchange losses	(61)	(110)
Exchange differences on translating foreign operations	61	110
Arrangement fee amortisation	(1)	(1)
At 31 December	**1,732**	**1,899**

At 31 December 2019, the Group had undrawn borrowing facilities of $1,904 million (31 December 2018: $1,119 million), of which $1,079 million are considered committed (31 December 2018: $1,069). The Group complied with its debt covenants throughout 2019 and 2018.

The table below summarises maturities of borrowings:

	Year ended	
	31 December 2019 $m	31 December 2018 $m
Year ended, 31 December 2019	–	117
31 December 2020	214	263
31 December 2021	241	500
31 December 2022	241	446
31 December 2023	257	469
31 December 2024	279	104
31 December 2025	–	–
31 December 2026	125	–
31 December 2027	125	–
31 December 2028	125	–
31 December 2029	125	–
Total	**1,732**	**1,899**

26. Environmental obligations

Environmental obligations include decommissioning and land restoration costs and are recognised on the basis of existing project business plans as follows:

	Year ended	
	31 December 2019 $m	31 December 2018 $m
Opening balance	**32**	**39**
Change in estimate of environmental obligations (Note 13)	(2)	(1)
Decommissioning liabilities recognised as increase in Property plant and equipment (Note 19)	16	(1)
Rehabilitation expenses	5	1
Effect of unwinding of discount	4	3
Reclassified to discontinued operations	(1)	(1)
Acquired in business combinations (Note 4)	–	2
Disposal of subsidiary (Note 4)	–	(4)
Translation effect	3	(6)
Closing balance	**57**	**32**

The principal assumptions are related to Russian Rouble and Kazakh Tenge projected cash flows. The assumptions used for the estimation of environmental obligations were as follows:

	Year ended	
	31 December 2019	31 December 2018
Discount rates	5.21%–8.1%	7.23%–10.68%
Inflation rates	2%–6%	2%–4.6%
Expected mine closure dates	1–30 years	1–34 years

The Group does not hold any assets that are legally restricted for purposes of settling environmental obligations.

The discount rates applied are based on the applicable government bond rates in Russia and Kazakhastan. The expected mine closure dates are consistent with life of mine models and applicable mining licence requirements.

27. Trade payables and accrued liabilities

	Year ended	
	31 December 2019 $m	31 December 2018 $m
Trade payables	73	72
Accrued liabilities	49	39
Labour liabilities	14	12
Provision for investment in Special Economic Zone (Note 13)	12	11
Other payables	5	12
Total	**153**	**146**

In 2019 the average credit period for payables was 30 days (2018: 28 days). There was no interest charged on the outstanding payables balance during the credit period. The Group has financial risk management policies in place, which include budgeting and analysis of cash flows and payment schedules to ensure that all amounts payable are settled within the credit period.

28. Commitments and contingencies

Commitments

Capital commitments

The Group's budgeted capital expenditure commitments as at 31 December 2019 amounted to $152 million (2018: $87 million).

Social and infrastructure commitments

In accordance with a memorandum with East-Kazakhstan Oblast Administration (local Kazakhstan government) the Group participates in financing of certain social and infrastructure development project of the region. During the year ended 31 December 2019 the Group paid $5 million (2018: $2 million) under this programme and the total social expense commitment as at 31 December 2019 amounts to $18 million (2018: $26 million), payable in the future periods as follows:

	31 December 2019 $m	31 December 2018 $m
Within one year	5	2
From one to five years	13	20
Thereafter	–	4
Total	**18**	**26**

Forward sale commitments

The Group has certain physical gold and silver forward sale commitments which are priced at the prevailing market price, calculated with reference to the LBMA or LME gold price, which are accounted for as executed as the Group expects to, and has historically, physically delivered into these contracts.

Contingencies

Taxation

Russian tax, currency and customs legislation is subject to varying interpretations, and changes, which can occur frequently. Management's interpretation of such legislation as applied to the transaction and activity of the companies of the Group may be challenged by the relevant regional and federal authorities and as a result, significant additional taxes, penalties and interest may be assessed. Fiscal periods remain open to review by the authorities in respect of taxes for three calendar years preceding the year of review. Under certain circumstances reviews may cover longer periods.

During 2019 and 2018 the Group has been involved in certain litigation in Russia. Management has identified a total exposure (covering taxes and related interest and penalties) of $100 million in respect of contingent liabilities (2018: $47 million), including $99 million related to income tax (2018: $46 million).

29. Fair value accounting

The following table provides an analysis of financial instruments that are measured subsequent to initial recognition at fair value, grouped into Levels 1 to 3 based on the degree to which the fair value is observable as follows:

- Level 1 fair value measurements are those derived from quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2 fair value measurements are those derived from inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly or indirectly; and
- Level 3 fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs).

At 31 December 2019 and 31 December 2018, the Group held the following financial instruments:

	31 December 2019			
	Level 1 $m	**Level 2 $m**	**Level 3 $m**	**Total $m**
Receivables from provisional copper, gold and silver concentrate sales	–	25	–	**25**
Chaarat shares	7	–	–	**7**
Contingent consideration liability	–	–	(66)	**(66)**
	7	**25**	**(66)**	**(34)**

	31 December 2018			
	Level 1 $m	Level 2 $m	Level 3 $m	Total $m
Receivables from provisional copper, gold and silver concentrate sales	–	60	–	**60**
Contingent consideration liability	–	–	(54)	**(54)**
	–	**60**	**(54)**	**6**

During the reporting periods, there were no transfers between Level 1 and Level 2.

The carrying values of cash and cash equivalents, trade and other receivables, trade and other payables and short-term debt recorded at amortised cost approximate to their fair values because of the short maturities of these instruments. The estimated fair value of the Group's debt, calculated using the market interest rate available to the Group as at 31 December 2019, is $1,482 million (2018: $1,660 million), and the carrying value as at 31 December 2019 is $1,732 million (2018: $1,899 million) (see Note 25).

Receivables from provisional copper, gold and silver concentrate sales

The fair value of receivables arising from copper, gold and silver concentrate sales contracts that contain provisional pricing mechanisms is determined using the appropriate quoted forward price from the exchange that is the principal active market for the particular metal. As such, these receivables are classified within Level 2 of the fair value hierarchy.

Contingent consideration liabilities

The table below sets out a summary of changes in the fair value of the Group's Level 3 financial liabilities for the year ended 31 December 2019:

	31 December 2019					31 December 2018
	Omolon $m	**Kapan $m**	**Komar $m**	**Prognoz $m**	**Total $m**	Total $m
Opening balance	11	8	21	14	54	62
Additions (Note 4)	–	–	–	–	–	14
Change in fair value, included in profit or loss	2	(2)	22	1	23	(7)
Unwinding of discount (Note 16)	1	–	–	1	2	1
Settlement though issue of shares (Note 31)	–	–	–	–	–	(10)
Cash settlement	(3)	(6)	(4)	–	(13)	(6)
Total contingent consideration	**11**	**–**	**39**	**16**	**66**	**54**
Less current portion of contingent consideration liability	(5)	–	(2)	–	(7)	(5)
Total non-current contingent consideration	**6**	**–**	**37**	**16**	**59**	**49**

29. Fair value accounting continued

Omolon

In 2008, the Group recorded a contingent consideration liability related to the acquisition of 98.1% of the shares in Omolon Gold Mining Company LLC ("Omolon"). The fair value of the contingent consideration liability was determined using a valuation model which simulates expected production of gold and silver at the Kubaka mine and future gold and silver prices to estimate future revenues of Omolon. This liability is revalued at each reporting date based on 2% of the life-of-mine revenues with the resulting gain or loss recognised in the consolidated income statement. The liability recognised as at 31 December 2019 is $11 million, including the current portion of $5 million.

Kapan

In 2016 the Group completed the acquisition of DPMK, the company owning the Kapan mine and processing plant in Armenia. The seller was entitled to receive a 2% NSR (Net Smelter Return) royalty on future production from the Kapan Gold Mine capped at $25 million. At the 31 December 2018, the fair value of the contingent consideration was estimated at $8 million, including current portion of $1 million. In January 2019, following the sale of Kapan (Note 4), the Group agreed with DPMK, to terminate the royalty owed to DPM via a buyout for a cash consideration of $6 million.

Komar

In 2016 the Group completed the acquisition of Orion Minerals LLP, the holding company for the Komarovskoye Gold Deposit ("Komar") in the Republic of Kazakhstan. The seller is entitled to the contingent consideration that was determined based on the LOM model of the Komarovskoye mine and calculated using Monte Carlo modelling (see below). At the 31 December 2019, the fair value of the contingent consideration was estimated at $39 million.

Prognoz

During year ended 31 December 2018 the Group completed the acquisition of Prognoz silver property. The consideration transferred included two separate contingent consideration liabilities. The first contingent liability represents a net smelter return ("NSR") royalty of between 2 and 4% pro-rated for the 45% holding, and dependent on the applicable statutory mineral extraction tax rate at the time when the asset enters commercial production. The royalty agreement is subject to a cap that increases progressively with the silver price. The fair value of the contingent liability is determined using a valuation model based on expected silver production and forecasted long-term flat silver prices.

The second contingent liability represents the NSR royalty in the range of 0.5% to 2.5%, pro-rated for the 50% holding and capped at $40 million. The royalty will be only payable if silver price is $19/oz or higher, with the actual royalty rate within the range determined on a progressive scale dependent on silver price. The fair value of the royalty is similarly determined using a valuation model based on the expected production of silver at the silver prices as above and is calculated using Monte Carlo modelling, which simulates expected production silver and the silver prices to estimate Prognoz future revenues.

As of 31 December 2019, the fair value of the total contingent consideration for Prognoz was estimated at $16 million.

Assumptions used in the valuation of the Omolon and Prognoz are consistent with those used in the calculation of net realisable value of metal inventories, such as long-term metal prices and discount rates. Estimated production volumes are based on life of mine plans and are approved by management as part of the long-term planning process.

Monte-Carlo assumptions

Monte-Carlo modelling contingent consideration was performed with the following inputs, where applicable:

- Gold price volatility: 16.30%
- Silver price volatility: 30.63%
- Average gold price for the last quarter prior to valuation date/ounce: $1,482
- Average silver price for the last quarter prior to valuation date/ounce: $17.32

The Directors consider that a reasonably possible change in a valuation assumption would not have a material impact on the financial statements for contingent considerations payable.

30. Risk management activities

Capital management

The Group manages its capital to ensure that entities in the Group will be able to continue as a going concern while maximising the return to stakeholders through the optimisation of the debt and equity balance. The Group's overall strategy is to provide value to stakeholders by maintaining an optimal short-term and long-term capital structure, reducing cost of capital, and to safeguard the ability to support the operating requirements on an ongoing basis, continuing the exploration and development activities.

The capital structure of the Group consists of net debt (borrowings as detailed in Note 25 offset by cash and cash equivalents and bank balances as detailed in Note 24) and equity of the Group comprising the Stated Capital account, reserves and retained earnings.

The Group's committed borrowings are subject to certain financial covenants. Compliance with covenants is reviewed on a semi-annual basis and the Group's Board is satisfied with forecast compliance with covenants on those borrowings.

The Group's Board reviews the capital structure of the Group on a semi-annual basis. As part of this review, the Board considers the cost of capital and the risks associated with each class of capital.

Major categories of financial instruments

The Group's principal financial liabilities comprise borrowings, derivatives, trade and other payables. The Group has various financial assets such as accounts receivable, loans advanced and cash and cash equivalents.

	Year ended	
	31 December 2019 $m	31 December 2018 $m
Financial assets		
Financial assets at FVTPL		
Receivables from provisional copper, gold and silver concentrate sales (Note 23)	25	60
Chaarat shares	7	–
Loans and receivables, including cash and cash equivalents		
Cash and cash equivalents (Note 24)	253	379
Trade and other receivables (Note 23)	16	21
Non-current loans and receivables (Note 23)	10	6
Total financial assets	**311**	**466**
Financial liabilities		
Financial liabilities at FVTPL		
Contingent consideration liability (Note 29)	66	54
Financial liabilities at amortised cost		
Borrowings (Note 25)	1,732	1,899
Trade and other payables (Note 27)	89	87
Total financial liabilities	**1,887**	**2,040**

Trade and other payables exclude employee benefits and social security.

The main risks arising from the Group's financial instruments are foreign currency and commodity price risk, interest rate, credit and liquidity risks.

At the end of the reporting period, there are no significant concentrations of credit risk for receivables at FVTPL. The carrying amount reflected above represents the Group's maximum exposure to credit risk for such receivables.

Presented below is a summary of the Group's accounts receivable with embedded derivative recorded on the consolidated balance sheet at fair value.

30. Risk management activities continued

	Consolidated balance sheet location	Year ended 31 December 2019 $m	 31 December 2018 $m
Receivable from provisional copper, gold and silver concentrate sales	Accounts receivable	25	60

	Location of gain (loss) recorded in profit or loss	Year ended 31 December 2019 $m	 31 December 2018 $m
Receivable from provisional copper, gold and silver concentrate sales	Revenue	2	5

Foreign currency and commodity price risk

In the normal course of business the Group enters into transactions for the sale of its commodities, denominated in U.S. Dollars. In addition, the Group has assets and liabilities in a number of different currencies (primarily Russian Rouble and Kazakh Tenge). As a result, the Group is subject to transaction and translation exposure from fluctuations in foreign currency exchange rates.

The Group does not currently use derivative instruments to hedge its exposure to foreign currency risk.

The carrying amounts of monetary assets and liabilities denominated in foreign currencies other than functional currencies of the individual Group entities at 31 December 2019 and 31 December 2018 were as follows:

	Assets		Liabilities	
	31 December 2019 $m	31 December 2018 $m	31 December 2019 $m	31 December 2018 $m
U.S. Dollar	253	356	697	792
Euro	–	–	10	9
Total	**253**	**356**	**707**	**801**

U.S. Dollar denominated assets and liabilities disclosed above exclude balances outstanding held in Polymetal International plc and its intermediate holding companies, where the functional currency is U.S. Dollar ($) as described in Note 2.

Currency risk is monitored on a monthly basis by performing a sensitivity analysis of foreign currency positions in order to verify that potential losses are at an acceptable level.

The table below details the Group's sensitivity to changes in exchange rates by 10% which is the sensitivity rate used by the Group for internal analysis. The analysis was applied to monetary items denominated in respective currencies at the reporting dates.

	Year ended 31 December 2019 $m	 31 December 2018 $m
Profit or loss (RUB to U.S. Dollar)	(26)	(24)
Profit or loss (KZT to U.S. Dollar)	(19)	(20)

Provisionally priced sales

Under a long-established practice prevalent in the industry, copper, gold and silver concentrate sales are provisionally priced at the time of shipment. The provisional prices are finalised in a contractually specified future period (generally one to three months) primarily based on quoted LBMA or LME prices. Sales subject to final pricing are generally settled in a subsequent month.

Interest rate risk

The Group is exposed to interest rate risk because entities in the Group borrow funds at both fixed and floating interest rates. The risk is managed by the Group by maintaining an appropriate mix between fixed and floating rate borrowings. The Group does not currently hedge its exposure to interest rate risk.

The Group's exposure to interest rates on financial assets and financial liabilities are detailed in the liquidity risk section of this note.

For floating rate liabilities, the analysis is prepared assuming the amount of the liability outstanding at the end of the reporting period was outstanding for the whole period. A 100 basis point increase or decrease is used when reporting interest rate risk internally to key management personnel and represents management's assessment of the reasonably possible change in interest rates. If interest rates had been 100 basis points higher/lower and all other variables were held constant, the Group's profit for the year ended 31 December 2019 would have decreased/increased by $6 million (2018: $7 million). This is mainly attributable to the Group's exposure to interest rates on its variable rate borrowings.

The Group's sensitivity to interest rates has increased during the current period mainly due to the increase in variable rate debt instruments.

Credit risk

Credit risk is the risk that a customer may default or not meet its obligations to the Group on a timely basis, leading to financial losses to the Group. The Group's financial instruments that are potentially exposed to concentration of credit risk consist primarily of cash and cash equivalents and loans and receivables.

Trade accounts receivable at 31 December 2019 and 31 December 2018 are represented by provisional copper, gold and silver concentrate sales transactions. A significant portion of the Group's trade accounts receivable is due from reputable export trading companies. With regard to other loans and receivables the procedures of accepting a new customer include checks by a security department and responsible on-site management for business reputation, licences and certification, creditworthiness and liquidity. Generally, the Group does not require any collateral to be pledged in connection with its investments in the above financial instruments. Credit limits for the Group as a whole are not set up.

The credit risk on liquid funds is limited because the counterparties are banks with high credit-ratings assigned by international credit-rating agencies. The major financial assets at the balance sheet date other than trade accounts receivable presented in Note 24 are cash and cash equivalents at 31 December 2019 of $253 million (2018: $379 million).

Liquidity risk

Liquidity risk is the risk that the Group will not be able to settle its liabilities as they fall due.

The Group's liquidity position is carefully monitored and managed. The Group manages liquidity risk by maintaining detailed budgeting, cash forecasting processes and matching the maturity profiles of financial assets and liabilities to help ensure that it has adequate cash available to meet its payment obligations.

The following table details the Group's remaining contractual maturity for its financial liabilities with agreed repayment periods. The table has been drawn up based on the undiscounted cash flows of financial liabilities based on the earliest date on which the Group can be required to pay. The table includes both interest and principal cash flows. To the extent that interest flows are floating rate, the undiscounted amount is derived from interest rate curves at the end of the reporting period. The contractual maturity is based on the earliest date on which the Group may be required to pay.

30. Risk management activities continued

Presented below is the maturity profile of the Group's financial liabilities as at 31 December 2019:

	31 December 2019				
	Less than 3 months $m	**3–12 months $m**	**1–5 years $m**	**More than 5 years $m**	**Total $m**
Borrowings	68	216	1,106	639	**2,029**
Accounts payable and accrued expenses	89	1	–	–	**90**
Contingent consideration liabilities (Note 30)	4	3	45	28	**80**
Lease liabilities (Note 20)	1	4	22	20	**47**
Total	**162**	**224**	**1,173**	**687**	**2,246**

	31 December 2018				
	Less than 3 months $m	3–12 months $m	1–5 years 5 years $m	More than $m	Total $m
Borrowings	34	169	1,866	107	**2,176**
Accounts payable and accrued expenses	64	23	–	–	**87**
Contingent consideration liabilities (Note 30)	2	6	26	34	**68**
Total	**100**	**198**	**1,892**	**141**	**2,331**

31. Stated capital account and retained earnings

As at 31 December 2019, the Company's issued share capital consisted of 470,188,201 ordinary shares (2018: 469,368,309 ordinary shares) of no par value, each carrying one vote. The Company does not hold any shares in treasury (2018: none). The ordinary shares reflect 100% of the total issued share capital of the Company.

The movements in the Stated Capital account in the year were as follows:

	Stated capital account no. of shares	Stated capital account $m
Balance at 31 December 2017	**430,115,480**	**2,031**
Share issue for Prognoz	20,459,668	200
Share issue for Kyzyl deferred consideration	1,015,113	10
Share issue for Amikan	2,456,049	22
Share issue for Nezhda	13,486,579	136
Share issue for Saum	834,055	6
Issue of shares in accordance with DSA and LTIP plans	1,001,365	9
Balance at 31 December 2018	**469,368,309**	**2,414**
Issue of shares in accordance with DSA and LTIP plans	819,892	10
Balance at 31 December 2019	**470,188,201**	**2,424**

Reserves available for distribution to shareholders are based on the available cash in the Company under Jersey law. The Group has unremitted accumulated retained earnings based on local accounting standards of approximately $3.4 billion (2018: $2.5 billion), which if remitted without restrictions would fund the Group's anticipated dividends for a number of years, after allowing for related tax payments. The directors believe that the Company therefore has access to cash to fund the Group's anticipated dividends for a number of years.

Weighted average number of shares: Diluted earnings per share

Both basic and diluted earnings per share were calculated by dividing profit for the year attributable to equity holders of the parent by the weighted average number of outstanding common shares before/after dilution respectively. The calculation of the weighted average number of outstanding common shares after dilution is as follows:

	Year ended	
	31 December 2019	31 December 2018
Weighted average number of outstanding common shares	469,926,157	449,016,966
Dilutive effect of share appreciation plan	6,475,641	1,497,087
Weighted average number of outstanding common shares after dilution	**476,401,798**	**450,514,053**

There were no adjustments required to earnings for the purposes of calculating the diluted earnings per share during the year ended 31 December 2019 (year ended 31 December 2018: nil).

At 31 December 2019 the outstanding LTIP awards issued under all outstanding tranches represent dilutive potential ordinary shares with respect to earnings per share from continuing operations as these are in the money as of reporting date (31 December 2018: the outstanding LTIP awards issued under 2014–2016 tranches represent dilutive potential ordinary shares).

The awards issued under management bonus deferral award plan are dilutive as of 31 December 2019 and 31 December 2018 being contingently issued shares and are included in the calculation of diluted EPS based on the weighted average number of shares that would be issuable if the end of the reporting period were the end of the contingency period.

32. Share-based payments

For the year ended 31 December 2019, share-based compensation in the amount of $12 million including $2 million of management bonus deferral award (2018: $12 million and $1 million, respectively) was recognised in general, administrative and selling expenses in the consolidated income statement (Note 12). As of the reporting date the unrecognised share-based compensation expense related to non-vested equity-settled stock appreciated rights is detailed as follows:

	31 December 2019			31 December 2018	
	Number of option granted shares	**Expected amortisation period years**	**Unrecognised share-based compensation expense $m**	Expected amortisation period years	Unrecognised share-based compensation expense $m
Tranche 2015	2,636,366	–	–	0.3	1
Tranche 2016	2,039,787	0.3	1	1.3	3
Tranche 2017	2,070,002	1.3	4	2.3	8
Tranche 2018	2,549,754	2.3	6	3.3	9
Tranche 2019	2,831,753	3.3	10	n/a	n/a
			21		**21**

During the year ended 31 December 2019 total amount of 819,892 shares were released and issued in accordance with management bonus plan deferral award and the long-term incentive plan (2018: 1,001,365 shares in accordance with management bonus plan deferral award and the long-term incentive plan). The assumptions used in the calculation and fair value of one award, calculated based on those assumptions, are set in the table below:

	Tranche 2015	Tranche 2016	Tranche 2017	Tranche 2018	Tranche 2019
Risk free rate	1.17%	1.11%	1.60%	2.49%	2.32%
Expected volatility	43.70%	42.05%	41.65%	34.03%	33.87%
Constant correlation	30.86%	32.32%	34.49%	33.70%	39.54%
Expected life, years	4	4	4	4	4
Share price at the date of grant ($)	8.2	10.3	13.3	10.2	11.0
Fair value of one award ($)	3.8	4.6	6.9	4.0	4.3

Dividend yield is not incorporated into the calculation of the fair value of the awards, as Dividend equivalents will be received on vested shares, reflecting the value of dividends, which have been paid during the period from the grant date to the vesting date.

33. Related parties

Related parties are considered to include shareholders, affiliates, associates, joint ventures and entities under common ownership and control with the Group and members of key management personnel.

As of 31 December 2019 and for the year ended 31 December 2019 the Group does not have any significant balances outstanding or significant transactions with the related parties. For the year ended 31 December 2018 transactions with related parties were represented by purchases of ore from equity method investments of $22 million and sales of machinery and equipment to the joint ventures of $15 million.

As of 31 December 2019 and 31 December 2018 the share of non-controlling interest in Amikan GRK amounting to the $7 million was held by a related party (31 December 2018: $5 million).

The remuneration of directors and other members of key management personnel during the periods was as follows:

	Year ended	
	31 December 2019 $m	31 December 2018 $m
Share-based payments	3	3
Short-term benefits of board members	2	2
Short-term employee benefits	3	3
	8	**8**

34. Notes to the consolidated statement of cash flows

	Notes	**Year ended 31 December 2019 $m**	Year ended 31 December 2018 $m
Profit before tax		618	426
Adjustments for:			
Depreciation and depletion recognised in the statement of comprehensive income		243	186
Write-down of exploration assets and construction in progress	19	9	24
Write-down of metal inventories to net realisable value	22	19	21
Write-down of non-metal inventories to net realisable value	22	(1)	2
Share-based compensation	12, 32	12	12
Finance costs	16	81	71
Finance income		(7)	(8)
Rehabilitation expenses		5	1
Change in contingent consideration liability	29	23	(7)
Share of loss of associates and joint ventures		–	1
Foreign exchange gain		36	40
Revaluation of initial share on business combination		–	(41)
Loss on disposal of subsidiaries, net		16	54
Write-down of assets held for sale		28	–
Other non-cash expenses		4	3
		1,086	**785**
Movements in working capital			
Increase in inventories		(81)	(150)
Increase in VAT receivable		(45)	(19)
Increase in trade and other receivables		(54)	(24)
Increase in prepayments to suppliers		(12)	(34)
(Decrease)/Increase in trade and other payables		(16)	134
Increase in other taxes payable		–	3
Cash generated from operations		878	695
Interest paid		(81)	(74)
Interest received		6	4
Income tax paid		(107)	(112)
Net cash generated by operating activities		**696**	**513**

There were no significant non-cash transactions during the year ended 31 December 2019, other than in respect of share based payments (2018: the issuance of 38,251,464 shares for several business combinations and other transactions).

Cash outflows related to exploration amounted to $39 million for the year ended 31 December 2019 (2018: $43 million). During the year ended 31 December 2019, the capital expenditure related to the new projects, increasing the operating capacity amounts to $246 million (2018: $146 million).

35. Subsequent events

There were no subsequent events.